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# AYUHHOM

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**NORTH EASTERN INSTITUTE OF AYURVEDA & HOMOEOPATHY (NEIAH)  
MAWDIANGDIANG, SHILLONG, MEGHALAYA -793018 (INDIA)**



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**North Eastern Institute of Ayurveda & Homoeopathy (NEIAH)**  
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## EDITORIAL

### Good Mentoring

The highly essential components for a good academic institution are quality teachers, quality students, up to date curriculum and necessary basic required infrastructure. Out of these four components, infrastructure though given visible identity of the institute, it is not necessarily basic pillar. It can be added, uplifted and can be used up to maximum utilisation as per availability. Curriculum and syllabus are implemented and governed by university and respective governing councils and it is observed that continuous process of revision, up gradation are undertaken by the concerned agencies time to time as per the policy of Govt. of India. So, these two are relatives and not directly under the control of college administration. On the other hand, for qualitative outcome of human resource from these institutes depends on quality intake of students and quality faculty members is highly essential. It is praiseworthy initiative has been taken by the Government of India by streamlining the admission policy to different stream of medical science through NEET. Though initially there was a minor difficulty, now majority of the institutes all over the country, student society, it is well accepted. Still there are some efforts seen in certain quarters of AYUSH system to smoothly accept NEET entrance policy. Need of hour is strict and uniform implementation of entrance policy through NEET. There should not be any other thoughts in this regard.

Next important matter is to select and recruit quality teachers (faculty members) in AYUSH colleges. It is the need of the hour to administratively streamlining teachers quality and their delivering of quality teaching activities, which does not effect and jeopardise the academic features, professional aptitude. Different agencies namely Government of India , different governing councils, state government, universities and management of private institutes should take very serious effort and strong determination to recruit quality teaching faculties to properly motivate young tender minds of students, admitted through NEET, in different AYUSH system of colleges. Unfortunately it is observed that majority of private institutes are not giving concern in this regard. It is encouraging that Ministry of AYUSH, GOI has taken serious views for streamlining quality teaching, for recruitment of efficient and quality teachers. The Ministry has notified advisory in this regard. But, recruitment of quality faculty in AYUSH College is a big challenge and complicated matter in totality. There is ambiguity, divergent problematic issues to proper recruitment of quality teachers. Mushrooming of large number of colleges in AYUSH systems and simultaneously opening of post graduate teachings and producing a large number of post graduate students in different discipline of different systems is not up to the mark. A very few notable institutes/colleges are countable in finger tips in terms of quality of their product with post graduate qualifications. This certification of qualification without quality forced. These teachers to impart sub-standard education to their students or indulge in undesired shameful practices from legal point of view and morality. These are core issues in AYUSH system for uniformly imparting quality UG and PG education and this is a very serious issue which push the whole system of AYUSH education in a critical juncture. Students are not trained properly in their own system forcing them to opt out for practice of other system of medicine (allopathy) for earning their livelihood and ultimately bringing bad reputation to their own system. It serves the vested interested groups, education mafias, pharmaceutical industry and also promotes quackery in legal sense.

So, it is highly essential that they recruit quality faculty in AYUSH colleges, only having PG degree in concerned subject to be adopted. Allied or inter-disciplinary appointment should be discouraged. Recruitment rules should be properly framed and to be monitored and modified from time to time as per guidelines of UGC. Even during determination of MSR, governing council rules should be in reference to basic criteria of higher education like UGC structure of pyramidal shape of each department such that minimum one Professor, two Associate Professors, four Assistant Professors should be composed for one department in any system. There may be some prospective positive signs but it may not be pleasing to all. Same thing is also applicable in cases of opening of new colleges and permission to open PG courses. So, after admitting quality students, it is to be expected smooth functioning, desired outcome, scientific rationale to accept by the society all systems of AYUSH in true spirit. It is matter of great need of introspection by all stake- holders of AYUSH system. Hopefully under the leadership of dynamic administration in AYUSH Ministry, we can see a ray of hope, that quality teachers will be available in colleges of AYUSH system and really capable teachers who can deliver to ignite the quest of knowledge in the mind of the young students, those who aspire quality education in AYUSH system to be better professional in future.

Young energetic and vibrant group of students need mentor to guide in order to excel in their own professional career within their own stream. Mentors who can help tender minds to understand holistic concepts of Ayurveda and create new knowledge with scientific temperament. Teachers not only to be preachers and mentors, they need to become good mentor as well as philosopher and guide to young minds and attract respect as ideal teachers.

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**Prof. (Dr.) P.K. Goswami**  
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## Hyperactivity of Catecholamines - A possible pathophysiological background of Homoeopathic pathogenesis of *Aconitum napellus*

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### Abstract

**Background** - *Aconitum napellus* (Aconite) is one of the most popular well proved Homoeopathic medicines. It is frequently prescribed at the beginning of acute conditions related to inflammation or functional abnormalities in different systems and organs, as in cardiovascular, respiratory, gastrointestinal, neurological, endocrinal disturbances associated with a state of anxiety and restlessness. These are often caused by fear or fright, or exposure to dry and cold weather. In proper application, Aconite can cut short the career of these conditions. Catecholamines are the secretory products of the adrenal medulla and sympathetic nervous system, which are important for defensive reaction to potentiate the organism's chances of survival by fight-or-flight response. Objective – In this study it has been tried to understand the possibility of influence of catecholamines which are directly or indirectly involved in the patho-physiological background of the Homoeopathic pathogenesis of Aconite. **Method** – Correlation between Homoeopathic pathogenesis of Aconite collected from the experiences of the pioneers with the actions of catecholamines related to these pathogenesis from different research works (in animal and human models) and their explanations. **Result** - Expression of psycho-neuro-endocrinal activities of catecholamines, especially noradrenaline have similar effects as that of essence of Homoeopathic pathogenesis of Aconite. **Conclusion** – Hyperactivity of catecholamines, especially noradrenalin (norepinephrine) might have a major role in the patho-physiological background of the pathogenesis of Aconite. So, it might be the possible background of producing pathology when Aconite seems to be indicated to prescribe as per Homoeopathic principle.

**Key-words:** *Aconitum napellus* (Aconite), Catecholamines, Homoeopathic pathogenesis, Noradrenalin (Norepinephrine).

### Introduction

Aconite roots are traditionally used in Chinese and Japanese medicine for analgesic, anti-rheumatic and neurological indications <sup>1</sup>. There are several alkaloids in aconite species. Among these alkaloids, Aconitine, 3-acetylaconitine and hyaconitine have been reported for acute toxicity <sup>2,3</sup>.

It is also known that roots of Aconite contain physiologically active catecholamine analogs <sup>4</sup>. It has direct effect on adrenal and in release of catecholamines <sup>5</sup>. Aconitine has also an ability to increase plasma corticosterone level <sup>6</sup>.

In the Homoeopathic pathogenesis, Aconite is often used for acute inflammatory conditions in different systems or organs; fever; vertigo, fainting, palpitations as are from acute cardiac affections; cessation of menstruation, miscarriage related to female endocrinal disorders; neuralgias; acute haemorrhages etc. associated with mental anxiety, fear, restlessness, and increased thirst. These conditions are found to be caused by fear or fright, or from exposure to dry, cold weather <sup>7-15</sup>.

Catecholamines, which are secreted from adrenal medulla comprises 75-80% adrenaline and 20-25% noradrenaline. Other than that neuronal sympathetic release of catecholamines comprises 80-90% is noradrenaline and 10-20% dopamine <sup>16</sup>. The Locus Coeruleus (LC), located adjacent to fourth ventricle in pontine brainstem is the largest group of noradrenergic neurones in Central Nervous System (CNS) <sup>17,18</sup>. Besides that, phagocytes (including macrophages, neutrophils and blood polymorphonuclear cells) also synthesize and release catecholamines <sup>19</sup>. On the other side, catecholamines, particularly noradrenalin has direct excitatory action on hypothalamus to increase secretion of corticotrophin releasing hormone (CRH) and so to elevate circulatory adrenocorticotrophic hormone (ACTH) <sup>20-22</sup>. Secretion of catecholamines is stimulated in response to number of stressful events, related to fight-or-flight responses, exercise, hypoglycaemia, cold, haemorrhage and hypotension. And increased secretion may accompany different emotional reactions, like fear, anger, pain

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and sexual arousal<sup>23</sup>. Short term danger like fear factor activates the amygdale. The amygdale responds to this fear or danger by initiating an immediate sympathetic response through neuroendocrine system to restore homoeostasis, and in initial stage, signals the brain stem to release sympathetic catecholamine - norepinephrine. Once release in blood flow it increases heart rate, blood pressure and respiration, vasoconstriction of arterioles, stimulate sweat secretion and papillary dilatation. Importantly, this short term sympathetic response is pro-inflammatory, functioning to destroy antigen, pathogens or foreign invaders<sup>24</sup>.

In respect of the duration of course regarding stress related altered immune function, chronic stressors are deleterious. But, the short stressors (last less than two hours) also enhance some aspects of immune function as in sudden unpredictable or uncontrollable stress may cause more persistent immune dysregulation<sup>25</sup>.

Cold exposure stimulates catecholamine secretion. In whole body cold exposure, exposure of acute cold air, eating ice cubes, short time cold exposure even in cold season, nor-epinephrine level increases significantly. It was also found that, in very hot environment (in hyperthermia fatalities) level of noradrenalin was high with low adrenalin<sup>23, 26</sup>.

In the circadian clock, catecholamines secretion level peaked in late morning and become low at night during sleep but on the other hand, norepinephrine was greater in older subjects by 28% during the day and 75% at night<sup>27</sup>.

Similar to the characteristic Homoeopathic pathogeneses of Aconite, hyperactivity of catecholamines also cause panic disorders<sup>28-35</sup>, acute inflammatory responses<sup>36-53</sup>, fever<sup>18,54,55</sup>, increased susceptible to various infections<sup>56-79</sup>, acute heart affections even cardiogenic shock<sup>80-86</sup>, haemorrhage<sup>87-90</sup>, disturbed endocrinal activities related to secondary amenorrhoea or spontaneous preterm delivery<sup>91-96</sup>, neuralgia<sup>97,98</sup>, retinal vasculitis<sup>99</sup>, periodontal diseases<sup>100-102</sup>, increased thirst<sup>103,104</sup> etc.

#### **Fundamentals of Homoeopathic Pathogenesis of Aconite from the experiences of Pioneers<sup>7-15</sup>**

- *Aconite* causes general functional disturbances, no evidence that it can produce tissue change – its action is brief and shows no periodicity. Its sphere is in the beginning of an acute disease and not to be continued after pathological change comes<sup>7</sup>. It raises an arterial and nervous storm, and, though in fatal cases its fury may be great enough to induce chaos, that is, death, yet it does not localize itself in organic changes<sup>8</sup>. It seems to be useful only in acute diseases, yet it is an indispensable accessory remedy in even the most obstinate chronic affections, when the system requires a diminution of so called tension of the blood vessels<sup>9</sup>.
- Chill, fright, or surgical operation – the effect of these will be met in large majority of cases by *Aconite*<sup>10</sup>. Ailments from fright; afraid in dark; vertigo; faintness; trembling; cardiac weakness; threatened miscarriage; impending cessation of menstrual flow; burning in stomach<sup>11</sup>. Complaints and tension caused by exposure to dry, cold weather, drought of cold air, checked perspiration, also complaints from very hot weather, especially gastro-intestinal disturbance, etc.<sup>7</sup>.
- A state of fear, anxiety; anguish of mind and body. Physical and mental restlessness, fright, is the most characteristic manifestations of *Aconite*<sup>9,7</sup>. In addition to thirst and quick pulse, present anxious impatience, an unappeasable mental agitation, and agonizing tossing about in the morbid state of acute inflammations of any part to those seen in persons who have had a fright combined with vexation, is the surest and quickest remedy for them<sup>9</sup>.
- Acute, sudden and violent invasion, with fever. Fever in which *Aconite* is specific is neurotic, not toxaemic or sympathetic in nature. It is “synocha” of old authors, the pure inflammatory fever with full and bounding pulse, great heat and restlessness, unquenchable thirst for large quantities of water, with extreme nervous excitability and tossing about in agony, worse towards evening and after getting in bed<sup>7,12,13</sup>.
- It may be employed in meningitis, ophthalmia, tonsillitis, croup, bronchial catarrh, pneumonia, pulmonary congestion and haemoptysis, pleuritis, pericarditis and endocarditis, gastritis, peritonitis, acute rheumatism, neuralgia supra-orbitalis but only when moral symptoms named by Hahnemann are present as characteristic indications of *Aconite*, “the anguish of mind and body, the restlessness, the disquiet not to be allayed”<sup>8</sup>. In inflammation of the bladder, in suppressed urine, or menses, and endless other conditions resulting from or accompanied by chill, shock, fright, fear<sup>14</sup>. Toothache caused by dry, cold wind; gastric catarrh from chilling stomach with ice water, especially when overheated. Pain intolerable; more so at night<sup>11</sup>.
- Plethora; active capillary congestions<sup>11</sup>. Active haemorrhage in stout, plethoric people. Passes almost pure blood by stool. In haemoptysis the blood comes up with great ease by hemming and coughing, bright red in large quantities, from cold, dry winds, with great fear, anxiety and palpitations<sup>10</sup>.
- It is very useful in all diseases of the heart characterised by increased action<sup>12</sup>. It has wonderful soothing effect in heart disease, where an acute condition has supervened, with palpitations, anguish, and great distress<sup>14</sup>. On rising from a recumbent position the red face become deathly pale, or he becomes faint or giddy and falls, and he fears to raise again; often accompanied by vanishing of sight and unconsciousness<sup>15</sup>.
- In other conditions - Urethral fever ensues upon catheterism<sup>12</sup>. Facial paralysis from exposure to cold and

dry winds<sup>10</sup>. Almost specific in facial neuralgia, especially of congestive form. Incipient inflammation of the eye after mechanical injury, whether accidental or operative<sup>12</sup>.

### **Action of Catecholamines –**

#### **Emotional disturbances – Panic disorders:**

Along with other systemic affections, massive secretion of catecholamines (due to uncontrolled stress response) may also be responsible for fear, anxiety in the level of panic disorders. In this respect, noradrenergic over activity due to increased and altered regulations of brain noradrenergic functions, related to elevated LC neurones firing, is often associated with anxiety and fear responses as in panic disorders<sup>28-34</sup>.

It has been reported that Norepinephrine Bitartrate has adverse side effect to manifest fear of death<sup>35</sup>.

#### **Immune response – Pro/anti-inflammatory activity:**

The CNS, endocrine system and immune system are complex systems and they interact with each other. In between CNS and immune system, there is reciprocal regulation exists. CNS signals immune system via hormonal and neuronal pathway, and immune system signals the CNS through cytokines<sup>36</sup>.

Short term stressors increase natural killer cells activity, increase the number of some types of leukocytes. Stress hormones modulate immune cell function by binding its receptors at the surface of cells within lymphoid organs. Norepinephrine is released from the sympathetic nerve terminals and the target immune cells express adrenoreceptors. Stimulation of these receptors, locally released norepinephrine, or circulating catecholamine affect lymphocyte traffic, circulation, and proliferation as well as modulate cytokine production and the functional activity of different lymphoid cells<sup>37-44</sup>. In a study, norepinephrine has found to modulate inflammatory and proliferative phases of wound healing by increasing recruitment of innate immune cells and expediting wound closure<sup>45</sup>. It was also observed that not only pro-inflammatory, but role of norepinephrine has been found in both pro- as well as anti-inflammatory under stressful conditions, depends on the duration, intensity, perception, acute or chronic in nature, time point - whether before outbreak or in later phases of the symptomatic disease in relation to the outbreak of a chronic inflammatory disease. In this respect in a study it has been found that since application of noradrenalin at high concentrations ( $10^{-6}$  M) via  $\alpha_2$ -adrenoceptors is anti-inflammatory by strongly inhibiting Tumour-necrosis factor (TNF) and the other side, the loss of sympathetic nerve fibers in inflamed tissue of rheumatoid arthritis patients leads to a pro-inflammatory situation<sup>46</sup>.

On the other hand, IL-6, a type of cytokines, produced by T cells, B cells, monocytes and several non-lymphoid cell types has pro-inflammatory action. It has an important role in acute phase response<sup>47</sup>. Both physical and psychological stressors can provoke transient increase of this pro-inflammatory cytokines<sup>48, 49</sup>. It has been demonstrated that norepinephrine stimulated IL-6 production<sup>50, 51</sup>. IL-6 is also an important inducer of C-reactive protein (CRP) from the liver. Combination of IL-6 and CRP may cause development of cardiovascular disease also<sup>47, 52</sup>. Besides that, it has also link with other various age related diseases like osteoporosis, arthritis, type 2 diabetes, frailty and functional decline even certain cancer such as chronic lymphocytic leukaemia<sup>53</sup>.

In another study, it has been observed that in acute condition phagocytes release catecholamines which directly enhance inflammatory response<sup>19</sup>.

#### **Fever:**

In response to systemic inflammation brain plays a central role and causes fever. Febrigenic peripheral signals including blood born cytokines may gain access to brain through different afferent pathways and increase the level of Prostaglandin E2 (PGE2). PGE2 triggers thermoeffector response and increases body core temperature. In this respect involvement of brain noradrenalin has been observed to release of PGE2<sup>18, 54</sup>. LC, the major noradrenergic nucleus in brain, is specifically activated and ultimately increases the level of PGE2 to activate thermogenesis<sup>55</sup>.

#### **Increased susceptibility to different pathogenetic organisms:**

Elevated levels of catecholamines activity may increase susceptibility to diseases<sup>56</sup>. Norepinephrine acts as a growth stimulating factor of the pathogens<sup>57-62</sup>. It induces not only adhesion to the host cells but also supplies iron for the growth of bacteria<sup>63-66</sup>. As an example it has been found in *Escherichia Coli*, catecholamines can increase adhesion to host cells by up-regulating adherence association genes and alter host susceptibility to enteric infection<sup>67, 68</sup>. *Bordetella* cells take benefit from catecholamines to grow on respiratory epithelium<sup>69</sup>.

In catheter-related urinary tract infection, the common pathogenic bacteria are *Pseudomonas aeruginosa*, *Klebsiella pneumoniae*, *Proteus mirabilis*, *E. coli*, coagulase-negative staphylococci etc.<sup>70-72</sup>. Different research works established that catecholamines, especially norepinephrine acts as a growth stimulating factor for these pathogenic microorganisms<sup>57-62</sup>.

Intestinal pathogenic micro-organisms like *Shigella*, *Salmonella*, *E. coli* etc. increase their number when concentration of catecholamine increased especially noradrenalin and cause intestinal disorders like diarrhoea, dysentery or vomiting<sup>61, 62, 67, 68, 73, 74</sup>.

Herpes simplex virus (HSV) is a natural human pathogen which is the most important causative organism for facial paralysis<sup>105-107</sup>. Stress not only increases the development and severity of HSV infection in both the peripheral nervous system and CNS, but also suppresses components of primary cytotoxic T lymphocyte response to HSV infection<sup>75-79, 39</sup>. Stress related neuro-hormones, norepinephrine and epinephrine modify the cytolytic activity of macrophages against virus infected cells and suggest a possible neuroendocrine immunologic basis for the recurrence of HSV infection<sup>108</sup>. Regarding teeth and gum affections, stress induced changes in local catecholamines level and plays a significant role in the aetiology and pathogenesis of periodontal diseases. It is observed that autoinducer mechanisms may play an important role in the response of oral microorganisms to these stress hormones; thereby contributing to the clinical course of stress associated periodontal diseases<sup>100-102</sup>.

#### **Heart:**

*Aconite* has direct action on myocardium. After consumption of its roots, it may cause life threatening ventricular tachycardia<sup>80</sup>. It has been described that, *Aconite* induced arrhythmia does not seem to be the effect of neural cause but due to centrally evoked release of endogenous catecholamines<sup>81</sup>.

In this respect, over stimulated sympathetic nerve activity which may be induced by violent psychological stress like anxiety or any other means is resulting excessive concentrations of catecholamines capable of producing myocardial necrosis, even in the non-ischemic heart. Not only that, it may also responsible for the pathogenesis of ventricular fibrillation in early ischemia<sup>82</sup>.

Besides that, it has been observed noradrenergic over activity in the LC coinciding with the development of the hypertension<sup>83</sup>. Systemic surges in catecholamines cause coronary vasospasm and severe acute hypertension due to acute peripheral vasospasm which may be followed by peripheral vasodilatation and hypotension. So, clinically profound hypotension and cardiogenic shock are may be common complications which are not in extent of left ventricular impairment<sup>84</sup>.

#### **Dizziness and fainting – related to Cardiogenic shock/ Postural or orthostatic intolerance:**

Increased secretion of catecholamines is one of the causes of these conditions. Acute coronary as well as peripheral vasospasms are the resulting manifestations of systemic surges in catecholamines which may be followed by vasodilatations, clinically found as hypotension and cardiogenic shock<sup>84</sup>.

Sudden raise of plasma norepinephrine levels is related to postural or orthostatic intolerance. It is characterised by light-headedness, dizziness, palpitations, sweating, nausea and syncope. It primarily occurs not only with upright posture but sudden rising from a recumbent position are the precipitating circumstances and relieved by lying down<sup>85, 86</sup>.

#### **Capillary vessels and Haemorrhage:**

Sudden and sustained increases in systemic catecholamines potentiate the activation of endothelium causing vasospasm<sup>87</sup>. Catecholamines of peripheral systemic nerve endings lead to peripheral vaso-constriction which subsequently increases systemic vascular resistance and systemic blood pressure. Moreover, it increases central blood volume along with reduction in the compliance of left ventricle. All of these changes are followed by increase in pulmonary capillary hydrostatic pressure and damage to alveolar wall leads to leakage of fluid into the interstitium as well as intra alveolar space and resulting haemorrhage - the typical picture of neurogenic pulmonary oedema<sup>88</sup>.

It is also observed that association between presences of enlarged vessels at rhinoscopy with history of epistaxis in hypertensive patients<sup>89</sup>. An association between duration of hypertension and left ventricular hypertrophy and nasal artery enlargement determined by rhinoscopy might contribute some relation between these<sup>90</sup>.

#### **Secondary amenorrhoea – Pregnancy - Spontaneous Preterm delivery:**

In case of secondary amenorrhoea, there is no such direct role of catecholamine in this regard. But stress induced catecholamine especially noradrenalin can directly excites upon CRH secretion and CRH may directly inhibit gonadotropin secretion which causes functional secondary amenorrhoea<sup>91-93</sup>.

High catecholamines level in mid-pregnancy may be indicative of excess stressors and/or predisposition to elevated sympathetic activation related to the risk of spontaneous Pre-term delivery<sup>94</sup>. In another aspect, increased catecholamines cause uterine contractions by interrelationship action of alpha- and beta-adrenergic stimulation and the prostaglandin system<sup>95</sup>. Norepinephrine increases coordinate uterine activity and a presser response<sup>96</sup>.

#### **Neuralgia:**

It has been found that sympathetically maintained pain (neuralgia) become painfully hypersensitive to norepinephrine<sup>97, 98</sup>.

#### **Retinal vasculitis:**

Retinal vasculitis has been observed as an adverse side effect of noradrenaline<sup>99</sup>.

#### **Thirst:**

Involvement of catecholaminergic activity is stronger in induced drinking mechanism. In an animal (rat) study intracranial administration of noradrenaline frequently causes a burst of drinking before it starts to eat<sup>103</sup>. Dopaminergic neural system involves influencing polydipsia in humans. Elevated dopamine levels stimulate thirst centre<sup>104</sup>.

On the other hand dry tongue as well as dry mouth is usual phenomena in panic attack of anxiety and it may causes burning or unquenchable thirst.

## Conclusion

This study is intended to find out the area of altered physiological functions and developing internal pathologies of Aconite responsible for its pathogenesis. It has been found that fundamentals of Homoeopathic pathogenesis of Aconite are similar to the manifestations of patho-physiological changes resulting from hyperactivity of catecholamines especially noradrenalin (norepinephrine) in different systems as well as organs through neuro-endocrinal pathway. So, it might be concluded that hyperactivity of catecholamines especially noradrenalin is the possible initiating responsible pathological essence to develop pathogenesis of Aconite and similarly possible background of producing pathology when Aconite seems to be indicated to prescribe as per Homoeopathic principle.

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## Herbo-Mineral Combination Drug as Matravasti in Katigraha w.s.r to Inter Vertebral Disc Prolapse - A NOVEL CONCEPT

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### Abstract

Low Back Pain is also said to be the price man had to pay for the evolution from four-legged animal to bipedal being. It was ranked as 1<sup>st</sup> in leading cause for disability according to Global Burden of Disease Study 2017. Hence, effort has been made to search for a safe, effective and economical medicine. Based on patho physiology Inter Vertebral Disc Prolapse can be correlated with katigraha. *Katigraha* is a condition, where *kati ashrita saama vayu causes ruja* and *graha* in *kati*. *Katigraha* was first explained by *Shodhala* in *Gadanigraha*. As *Vasti* is known as *Ardha chikitsa* we have chosen *Matravasti* for *Katigraha*. Herbo-mineral formulation by name *Mahamasha tailam* 60ml and 1gm *Pravala Bhasma* for *matravasti* and *Rasona Ksheerapaka* 50ml as oral medicine have been chosen for the study. By performing *Vasti* with *Mahamasha tailam* and *Pravala Bhasma* we can nourish the disc with guru property of *Masha* and *snigdha* of *Tailam*. *Pravala* is known as best *asthi rasayana*. According to *Dalhana*, “*Yaeva kala Purishadharasaaeva Asthidharaiti*” Based on this quote *pureeshadhara* as *asthidhara kala*, we assume this as GIT contain more Na-Ca channels in its Auerbach plexus of muscle layers. When we give *pravala* in rectal route, large amounts of ionic calcium will be absorbed and action potential will be generated in short time. This will increase intestinal muscle contractions. When contractions increase, absorption of nutrients also will be more. So *dhatu kshaya* can be corrected. Through *deepana*, *pachanaguna* of *pravala* we can correct *aama* in shorter duration. Hence we have added *Pravala Bhasma* in *vasti*. A prospective randomized open label clinical study was carried out at Dr. BRKR Govt Ayurvedic College, Hyderabad. Total 30 patients were taken from OPD and IPD. They were treated for 72 days in three spells with an interval of 16 days. At the end of the treatment significant change was observed in subjective and objective parameters.

**Keywords:** Calcium Sodium channels, IVDP, *Katigraha*, *Matra Vasti*, *Maha Masha Tailam*, *Pravala Bhasma*, *Rasona ksheerapaka*.

### Introduction

Lumbago is also said to be the price man had to pay for the evolution from four-legged animal to bipedal being. It was ranked as 1<sup>st</sup> in leading cause for disability according to Global Burden of Disease Study 2017<sup>1</sup>. Busy and sedentary life style, improper sitting postures, lack of exercise, human spine is exposed to new patterns of force in distribution of weight and muscular tensions lead to herniation of nucleus pulposus and pressure at Posterior Longitudinal ligament, and finally Inter Vertebral Disc gets prolapsed.

In *Kati graha patho-physiology agnimandya* leads to *aama* which causes *margavarodha* and *vataviddhi* which finally results in *asthikshaya* (degeneration of vertebrae). According to *Charaka* in *asthikshaya*, *lakshanas* like *asthishoola*, *asthibheda*, *sandhi saithilya* and *medakshaya* were observed. Here in IVDP also degeneration of vertebrae which leads to pain, fragility of vertebrae and prolapse can be observed. Symptomatically it can be appraised as pain and stiffness in the initial stage and paraesthesia in later stages. Based on the patho physiology, Inter Vertebral Disc Prolapse is contributing majority to *Kati Graha*. In Ayurveda, *Katigraha* was first explained by *Acharya Shodala* in *Gada Nigraha*. *Kati Graha* is a condition, caused by *kati ashrita saamavayu*, which causes *ruja* and *graha*<sup>2</sup> in *kati pradesha*. *Sarangadhara* mentioned it as one of the *Vataja nanatmaja vyadhi*.

In spite of the high rates of prevalence all over the world and tremendous advancement of modern system of medicine i.e. NSAIDs, physiotherapy, and surgical intervention, an ideal treatment is not yet available for IVDP. Because of the varied etiological factors, greater recovery period, disc prolapse has become clinician's challenge. The treatments are conflicting and often un-rewarding as well. Treatments in modern medicine provide

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symptomatic relief and are also very expensive. Symptomatic management of a disease with muscle relaxants is always incomplete and cannot break up the chain of pathogenesis. Surgical intervention is not well accepted by the society as it involves some surgical risks. So, effort has been made here to search for a safe & effective medicine, without any side effect.

Keeping this in view to combat the disease, Herbo mineral formulation by name *Mahamasha tailam* and *Pravala Bhasma* for *matravasti* and *Rasona Ksheerapaka* as oral medicine have been chosen for the study. All ingredients in the formulation exclusively possess *vata* pacifying property.

## Material and Methods

30 patients were randomly selected from OPD and IPD of Dr. BRKR Govt. Ayurvedic College and hospital, Hyderabad.

### 1. Inclusion criteria

- Patients of the age of 25 – 50 years.
- Patients who are with signs and symptoms of katigraha.
- Patients who were already diagnosed as IVDP.
- Patients who are willing to participate in the study.

### 2. Exclusion criteria

- Patients who are below the age of 25 and above the age of 50 years.
- Patients in whom vasti is contraindicated.
- History of hypersensitivity to the trial drug or any of its ingredients.
- Patients having infective conditions of spine like T.B of spine etc.
- Patients having Ankylosing spondylitis and Spina bifida.
- Patients having abhighata janya katigraha.
- Patients with evidence of malignancy.
- Patients with uncontrolled Diabetes Mellitus, unstable cardio vascular disease.
- Patients suffering from other major systemic illness necessitating long term treatment.
- Patients with concurrent serious Hepatic disorder or Renal disorder.
- Smokers/ alcoholics/drug abusers.
- Pregnant or lactating women

## Methodology

1. Study type : Interventional
2. Purpose : Treatment
3. Masking : Open label
4. Control : Uncontrolled
5. Timing : Prospective
6. End point : Efficacy
7. No.of groups : One
8. Sample size : 30.

Treatment plan:



Follow up : 25<sup>th</sup>, 49<sup>th</sup>, 73<sup>rd</sup> days

**INVESTIGATIONS:**

- Complete Blood Picture
- Fasting Blood Sugar. Post Prandial Blood Sugar HbA1C
- Liver Function Test
- Renal Function Test
- X-Ray of lumbo sacral Spine Postero-Anterior view and Lateral view
- CT Scan /MRI of Lumbar Spine.

**Methods of assessment of treatment:**

- The effect of the therapy was assessed pertaining to improvement recorded in clinical findings.
- Changes observed in signs and symptoms were assessed by adopting suitable scoring methods and objective signs by using appropriate clinical tools.
- Both subjective and objective assessments were done in all patients before and after follow up period.

**Assessment Parameters with Grading:****Table No. I - Grading according to severity of Symptoms**

Grade	Symptom
0	Complete relief or no symptom
1	Presence of mild symptoms
2	Presence of moderate symptoms
3	Presence of severe symptoms

**Table No. II - Grading of Subjective Parameters**

S.No	PARAMETER	Grade-0	Grade-1	Grade-II	Grade-III
1	Pain on rest (Lying)	No complaint	Reveals enquiry on	Complaints frequently when moves joints	continuous pain
2	Pain on rest (On sitting):	No complaint	Reveals enquiry on	Complaints frequently when moves joints	continuous pain
3	Pain on movement (on walk) on plain surface	Can able to walk more than 10 mtrs	Can able to walk only Up to 5 mtrs	Can able to walk only Up to 3 mtrs	Cannot walk due to pain

Table No. III - Objective Parameters with Grading

S.No	PARAMETER	Grade-0	Grade-1	Grade-II	Grade-III
1	Tenderness	No tenderness	Pain on touch and winces	Withdraws the part	Not allow to touch the part
2	Lumbar flexion	Able to touch the ground	able to go upto ankle	able to go just below knee	Not upto knee
3	Lumbar extension	Able to do without difficulty	Able to do with some difficulty	Able to do upto shoulder	Can not able to do
4	Left Lateral Movement	Able to move hand below knee without difficulty	Able to move hand below knee with pain	Can not go below knee	No movement
5	Right Lateral Movement	Able to move hand below knee without difficulty	Able to move hand below knee with pain	Cannot go below knee	No movement
6	Rotation	Can rotate easily	Rotate with difficulty	Rotate to one side	Cannot rotate
7	Walking Time (Taken for 20 steps)	Upto 30 sec	31-40 sec	41-50 sec	51-60 sec
8	Straight Leg Raising Test	Negative	>70°	35° -70°	0-35°
9	VAS Score	0 (No Pain)	1-3 (Mild)	4-7 (Moderate)	8-10 (Severe)
10	Sugar Baker & Barofsy score	24	15-23	8-15	0-8
11	Greenough & Fraser method	>=65	50-64	30-49	0-29

Table No. IV - Drug Intervention

Drug intervention:

Sl.No	Name of the Drug	Route of administration	Time of administration	Dose	Period
1	Maha Masha Tailam and Pravala bhasma	Rectal	After Food	60ml and 1gm	72 days in three spells with interval of 16 days
2	Rasona Ksheerapaka	Oral	Empty stomach	50ml	72 days in three spells with interval of 16 days

Table No. V - Rasa Panchaka of Pravala Bhasma<sup>3</sup>

S.No	Sanskrit Name	English name	Latin/ Chemical Name	Rasa	Guna	Veerya	Vipaka	Karma
1	<i>Suddha Pravala</i>	Coral	Anthozoa polypus / Calcium oxide	Madhura, Amla	Lahu, Snigdha	Madhura	Sheeta	Kapha, vatasaamaka, Asthiposhaka

**Rasona Ksheera Paka:****Rasona:**

It is also called as Lasuna.

Table No. VI – Rasa Panchaka of Lasuna

S. No	Sanskrit Name	Latin Name	Family	Part Used	Rasa	Guna	Veerya	Vipaka	Karma
1	Lasuna	Allium sativum	Liliaceae	Bulb	Madhura, Lavana, Katu, Tikta, Kashaya	Guru, pichila Snigdha	Ushna	Katu	Asthimamsasandhanakara

**KSHEERA:**

Ksheera is the best dravya among Jeevaniya dravyas. As 10 gunas of milk and ojas are similar, milk acts as ojevridhikara<sup>5</sup>.  
Table No.VII Rasa Panchaka of Ksheera<sup>5</sup>

S.No	Sanskrit Name	Rasa	Guna	Virya	Vipaka	Karma
1	Ksheera	Madhura	Swadu, shita, Mridu, Snigdha, Gurupichila, Bahala, Slakshna	Sheeta	Madhura	Jivaniya, Manasakar, Rasayana

**KSHEERA PAKA:**

Medicated milk which is prepared by boiling the milk with drug and water until only milk remains is called *Ksheerapaka*. The ratio of drug, milk and water differ according to different *Acharyas*.

Table No. VIII - Ratio of Milk, Water and Drug according to different acharyas

S.No	Authors	Drug	Milk	Water	Reduction
1	Charaka <sup>6</sup> and Chakrapani <sup>7</sup>	1 part	8 part	8Part	Till milk part remains
2	Sharangadhara <sup>8</sup>	1 part	8 part	32 part	Till milk part remains
3	YadavjiTrikamji <sup>9</sup>	1 Part	15 part	15 part	Till milk part remains
4	Vagbhata <sup>10</sup>	<i>Kashaya</i> should be prepared as per the procedure, after that, equal quantity of milk is to be added, again re-heated till only milk part remains.			

*Rasona ksheerapaka* was mentioned in *Charaka chikitsa*, *Gulma chikitsa adhyaya*. *Ksheerapaka vidhi* is advised for the drugs which are *teekshna*, *ushna*, and *kashaya* rasa. As *Rasona* is *vatahara*, *Asthisandhanakara*, and *ksheera* is *asthiposhaka* and *jeevaniya*, *rasona ksheerapaka* was used orally in the management of *Katigraha*.

We have followed the method said by *Charaka* and *Chakrapani*. 6gms of *lashuna*, 50ml of water and 50ml of milk were taken. Total drug reduced to 50ml and *ksheerapaka* was attained.



Pravala



Pravala bhasma



Rasona



Ksheera

## Results

- The assessment of the overall effect of the treatment revealed that 13.3% of the patients recorded excellent result while 83.3% of the patients showed good and 3.33% of the patients had moderate result.
- Most of these are found to be statistically highly significant as per the Wilcoxon signed rank test (subjective parameters) and Paired 't' test (objective parameters).

**Table No. IX Overall assessment of results**

RESULT	NO OF PATIENTS	PERCENTAGE
Excellent	4	13.33
Good	25	83.33
Moderate	1	3.33
Mild	0	0

### Statistical analysis:

**Table No.X Statistical analysis of subjective parameters**

S.No	Lakshana	Mean		% of relief	S.D		S.E		t-value	p-value	S
		BT	AT		BT	AT	BT	AT			
1	Pain on Sitting	2.33	0.67	71.24	0.48	0.61	0.09	0.11	15.05	<0.0001	HS
2	Pain on Lying	2.30	0.56	75.65	0.47	0.57	0.09	0.10	21.079	<0.0001	HS
3	Pain on Walking	2.33	0.70	69.95	0.48	0.53	0.07	0.09	18.25	<0.0001	HS
4	Graha	2.30	0.77	66.52	0.47	0.57	0.08	0.09	14.69	<0.0001	HS

**Table No. XI - Statistical analysis of objective parameters**

S.No	Parameters	Mean		%of relief	S.D		S.E		t-value	p-value	S
		BT	AT		BT	AT	BT	AT			
1	Tenderness	2.10	0.10	95.23	0.31	0.34	0.06	0.08	16.57	<0.0001	HS
2	Lumbar Flexion	2.40	0.83	65.41	0.50	0.53	0.09	0.10	17.02	<0.0001	HS
3	Lumbar Extension	2.53	1.43	43.47	0.51	0.50	0.09	0.11	12.53	<0.0001	HS
4	Left Lateral Movement	2.13	0.87	59.15	0.35	0.68	0.06	0.12	13.32	<0.0001	HS
5	Right Lateral Movement	2.03	0.50	75.36	0.18	0.51	0.03	0.09	14.69	<0.0001	HS
6	Lumbar Rotation	1.93	0.57	70.46	0.58	0.50	0.11	0.09	12.17	<0.0001	HS
7	Walking Time	2.33	0.70	69.95	0.48	0.53	0.07	0.09	18.25	<0.0001	HS
8	SLR	2.60	0.90	65.38	0.50	0.66	0.09	0.12	13.25	<0.0001	HS
9	VAS	2.43	1.23	49.38	0.50	0.63	0.09	0.11	11.93	<0.0001	HS
10	Sugar Baker &Barofsy	2.40	1.17	51.25	0.50	0.53	0.09	0.10	13.43	<0.0001	HS
11	Greenough& Fraser score	2.33	0.93	60.08	0.61	0.64	0.11	0.12	12.33	<0.0001	HS

## Discussion:

**Age:** The highest percentage of age group seen is 25-35 years and next is 45-50 years. This is because of irregular postures and habits of younger people and degenerative changes of disc in the 45-50 age group.

**Occupation:** It reveals that prolonged sitting and standing postures, increased mental activity, and stress and strain contribute in establishment of *Kati Graha*. House wives also are more prone to this disease because of irregular house hold work, sitting and standing postures.

**Diet:** Mixed diet contains *katu, tikta, kashaya rasa aahara, sushka mamsa* and *viruddha aahara* which can aggravate vata and contribute one of the *Vataroga* i.e *Kati Graha*.

**Prakruti:** From this data it can be inferred that *Vata Pitta and Vata Kaphaprakruti* people are more prone to *Kati Graha* as they are main *doshas* involved in *Kati Graha*.

**Nidana:** When it comes to *nidana*, 20 (66.66%) patients were having habit of *katu, tikta Kashaya rasa sevana*, 21 (70%) patients were having *dukha sayyasana*, 19(63.33%) were having *vega dharana*, 8 (26.66%) were having *ratri jagarana*, 16 (53.33%) were having *atikrodha/ atichinta* (stress), 4(13.33%) were having *uchair bhashana* and *Ati adhva*. This indicates that the present life style and dietary habits contribute more to *vatavyadhis* like *Kati Graha*.

**Disc level:** L4-L5 and L5-S1 discs are most commonly affected. This is because of weak reinforcement of posterior fibres by posterior longitudinal ligament. Especially L4-5 and L5-S1 where it is midline, narrow, unimportant structure attached to annulus.

**Area of lesion:** Posterior region is most common area of lesion. This is because of incomplete annular lamellae in this quadrant i.e. each lamellae end with fusion to an adjacent lamellae not completely circular. Fibres of annulus were deficient posteriorly.

### Probable Mode of Action of Vasti procedure and Drugs *Maha Masha Tailam, Pravala Bhasma, Rasona Ksheerapaka* in *Kati Graha*:

#### On the basis of *karma*:

*Asthi poshaka* and *asthi sandhana karma* of *pravala* and *lasuna* and *brimhana* of *mashamay doasthi dhatu poshana* and modify degenerative changes of *asthi*.

#### On the basis of *Dosha Karma*:

All the ingredients were having *vata hara* property. Because of that *vyana* and *apanavata* were regulated. Symptoms like *ruja, graha* were relieved.

#### *Pravala Bhasma*:

*Pravala* is a by-product of tiny sea anemone that takes in minerals from the ocean and deposit coral on the ocean floors. Because of this digestion process, coral calcium is unique in its ionic, easily absorbable form.

#### Mode of action of *vasti*:

*Vasti* is known as *Ardha chikitsa* for Vatic disorders. It acts in the body in four dimensions i.e. by its action of unique Procedure, Drug, *Sroto Sodhana* and regulation of GUTBRAIN<sup>11</sup> system. If we administer *Pravala* orally, smaller amount will be absorbed than through rectal route. According to pharmaco kinetics, drug given in rectal route will have faster absorption and higher bio availability. *Pravala* is known as best *asthirasayana*. Based on Dalhana's quote *pureeshadhara* as *asthidhara kala*, we assume this as GIT contain more Na-Ca channels in its Auerbach plexus of muscle layers. When we give *pravala* in rectal route, large amounts of ionic calcium will be absorbed and action potential will be generated in short time. This will increase intestinal muscle contractions. When contractions increase, absorption of nutrients also will be more. So *dhatu kshaya* can be corrected. Through *deepana, pachanaguna* of *pravala* we can correct *aama* in shorter duration. Based on *Asrayaasrayi Sambandha* by increasing *Asthi dhatu* it alleviates *Vatadosha*. Thus, *vasti* acts as prospective treatment in management of IVDP.

## Conclusion

On completion of this study, conclusion drawn on the basis of deductive reasoning of data obtained from this clinical trial is as follows:

*Kati Graha* is considered as Inter Vertebral Disc Prolapse in the present study. It is a degenerative disorder involving *dhatu kshaya* and *margavarodha*. This is more prevalent in 25-30 years and 45-50 years aged *Vata pitta* and *Vata Kapha prakruti* persons and in people having mixed diet. *Ratri Jagarana* and *Atiadhva* were observed in most of the cases. *Katu ruksha ahara sevana* is one of the common *aharaja nidana* was observed in 66% of the cases. *Vega dharana* and *Dukh as ayyasana* are common *viharaja nidana* observed in 60% of cases. In the present trial, *Matravasti* with *Maha Masha Tailam, Pravala Bhasma* and oral *Rasona Ksheerapaka* were found effective. The present study by *Matravasti* with *Maha Masha Tailam* and *Pravala bhasma* and oral *rasona ksheerapaka* showed extremely statistically significant results ( $P < 0.0001$ ) in *Ruja, Graha* and *Heena Gamana Shakti*. No major hazardous side effects were noticed during the present study. So, it can be said to be a safer drug. As the sample size is too small (30) need of study with a bigger sample size to draw a valid conclusion.

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## Case Report

# Effectiveness of Ayurveda modalities in the management of Gridhrasi (Prolapsed Inter Vertebral Disc): A Case Study

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## Abstract

Due to globalization as well as urbanization people have sedentary lifestyle which is resulting in the problem of lower backache. The main cause of this problem is prolapsed intervertebral disc at the level of L4-L5 vertebrae. Protrusion of gelatinous nucleus pulposus through the rend of fibrous annulus fibrosus is called prolapsed intervertebral disc. This protruded gelatinous material compresses the roots of spinal nerves and this irritation produces the symptoms like lower backache radiating or non-radiating to unilateral or bilateral lower limbs. In Ayurveda, this condition resembles Gridhrasi. In the contemporary system of medicine NSAIDs and intradermal corticosteroid injection is the main treatment modality for pain management which causes a number of side effects. **Aim:** To evaluate the effectiveness of Ayurveda modalities in the management of *Gridhrasi*. Material and method: A case of PIVD (Prolapsed Inter Vertebral Disc) was treated with *Panchakarma* procedures and Ayurvedic oral drugs which have given satisfactory results with no side effects. The *Panchakarma* protocol designed for this particular patient was *Sarvanga Abhyanga* ( therapeutic massage) with *Laghu Vishagarbha Taila*, *Sarvanga Swedana* ( sudation therapy) with *Dashamoola Kwatha*, along with oral medication as *Trayodashanga Guggulu* 3 gm daily in three divided doses and *Eranda Taila* 10 ml twice a day with luke warm water for 14 days.

**Result:** Visual Analogue Scale, Oswestry Disability Index and SLRT were considered as parameters of assessment. There was sustained satisfactory improvement in patient's condition over 2 months of follow-up.

**Conclusion:** This case study shows that PIVD can be successfully managed by Ayurvedic treatment modality.

**Keywords-** Ayurveda, *Gridhrasi*, lower backache, prolapsed intervertebral disc

## Introduction

World wide up to 80% of people experience lower back pain at some point in time in their life, and according to Kelsey and White, an even larger proportion have found to have degenerative spine disease at autopsy . Chronic back pain which is defined as pain lasting more than 12 weeks has a prevalence of 5.9% to 18.1% . Recurrent meningeal or sinu-vertebral nerves are the branches of spinal nerve which supply pain fibers to the intraspinal ligaments, periosteum of bone, the outer layer of annulus fibrosus and the capsule of the articular facets. Although spinal cord itself is insensitive, but so many conditions produce pain by involving the adjacent structures. Among all the signs in detecting nerve root compression, straight leg raising and Laseague's sign is the most useful. The fully developed syndrome of the common prolapsed intervertebral lower lumbar disc is i.) pain in buttock radiating to bilateral or unilateral lower limb, ii.) a stiff or unnatural spinal posture, iii.) some combination of paraesthesia, weakness and reflex impairment. Pain management and resume of activity is the main aim in the management of lower lumbar disc disease. Pain management is done in many ways i.e. traction, oral analgesics as NSAIDs, uploads and corticosteroids. Which can result in lots of complications including rare disease i.e. fungal meningitis. These managements Provide short term improvement and the need for surgery is always there. Variants of hemilaminectomy with excision of the disc fragment are the most widely used surgical procedures for lumbar disc diseases . These uncertainties in the management of this disease made us think to explore some ayurvedic ways for the management of this disease

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In Ayurveda this disease condition is related to *Gridhrasi* which is described under the umbrella of *Vatavyadhi*. Etiological factors for all the *Vatavyadhis* are common which includes inappropriate and excessive exercises, swimming, jumping, excessive walking, trauma, falling from vehicles. Symptoms of this disease are pain, stiffness, pricking or pulsatile sensation starting from the gluteal region then radiating to the waist, back, thigh, lower leg and foot. *Snehana* (Ayurvedic therapeutic massage) and *Swedana* (sudation therapy) is first general treatment modality of all the *Vatavyadhi*. Administration of *Mriduvirechak Dravya* (mild purgative drugs) is also advised in the form of *Eranda taila* (Castor oil) in the management of *Vatavyadhi*.

## Material and Method:

### Case Report

A 23-year-old Hindu, male patient visited CBPACS Kayachikitsa OPD on 13th March 2019 having central I.D. no. 28993 with the complaint of severe pain in waist radiating to bilateral lower limbs. The pain was severe agonizing type and he was unable to walk himself. The patient had pain for one year. Initially had mild pain but gradually pain increased and affected his daily activity. For one month he was unable to walk without support and had severe pain. For one year had consulted physicians who asked for intradermal injections and physiotherapy. But the condition gets worse. So, the patient visited here for better management for his ailment.

### Aims and objectives:

To evaluate the efficacy of Ayurveda remedies in the management of Gridhrasi (Prolapsed Inter-Vertebral Disc.)

### Case findings

The patient was admitted to the I.P.D. ward of *Kayachikitsa* with I.P.D. registration no. 18319. The general condition of the patient was not good. He was anxious, appetite was moderate, and tongue was coated. His blood pressure was 110/70 mm Hg. The pulse rate was 78 per minute and was full in volume and regular. The range of movement of bilateral lower limbs were restricted and painful. There was tenderness in the lumbar area. There was no difficulty in defecation and micturition. No numbness was present in the lower extremity. There was no history of any fall or trauma. During physical examination, SLR (Straight Leg Raising) Test was done which was 0 degree on the left and 50 degrees on the right. On muscle examination, there was coordination of upper and lower limbs. Muscle bulk, Power, Tone was normal. Deep tendon reflexes and superficial reflexes were normal. The patient was working as B.P.O. employee doing night shifts. His ESR was raised. He was vegetarian. *Dasha Vidha Pariksha* was done for patient assessment. The patient has *Kapha Pittaj Prakriti, Vikriti – Vata Kaphaj, Sama Pramana, Madhyama Sara*, with *Avara Vyayam Shakti*, and *Avara Bala*.

Table no. 1: Time line of events:

Duration	Particular and interventions
March 2018	First episode of lower backache
March 2018 – May 2018	Managed with allopathic treatment
December 2018	Lower backache increased gradually
January 2019 – February 2019	Severity of pain increases
11 <sup>th</sup> March 2019	Unable to get up and stand by his own
13 <sup>th</sup> March 2019	Gets admitted in hospital
14 <sup>th</sup> – 28 <sup>th</sup> March 2019	Treatment with <i>Sarvanga Abhyanga</i> with <i>Laghu Vishagarbha Taila</i> , <i>Sarvanga Swedana</i> with <i>Dashmoola Kwatha</i> , <i>Trayodashanga Guggulu</i> 3 gm in 3 divided doses and <i>Eranda Taila</i> 10 ml BD with luke warm water
5 <sup>th</sup> April 2019	First Follow up
13 <sup>th</sup> April 2019	Second follow up
20 <sup>th</sup> April 2019	Third follow up
27 <sup>th</sup> April 2019	Fourth follow up

### Diagnostic focus and assessment

The diagnosis was done on the basis of symptoms and MRI findings. In Ayurveda this condition resembles *Gridhrasi*. To reconfirm the diagnosis of prolapsed intervertebral disc, MRI was done. In MRI there was diffuse disc bulge at L3-L4 and L4-L5. And there were no signs of sacroiliitis. Thus ankylosing spondylitis was excluded. In MRI there were no signs of any fracture, benign or malignant tumors, any degenerative diseases, any anatomical or congenital deformities. So, these things were excluded from the differential diagnosis.

### Treatment Plan

During the course of treatment *Panchakarma* procedures were done in form of *Sarvanga Abhyanga* (therapeutic massage) with *Laghu Vishagarbha Taila* and *Sarvanga Vashpa Swedana* (sudation therapy) with Dashmoola Kwatha, Trayodashanga Guggulu 2 gm per day in three divided doses with lukewarm water after meal, and *Eranda Taila* 10 ml BD with lukewarm water after meal for 14 days. (Table No.1)

**Table no. 2: Details of procedures used during treatment:**

No.	Name of procedure	Drug used	Method	No. of days
1.	<i>Sarvanga Abhyanga</i> (therapeutic massage)	<i>Laghu Vishagarbha Tail</i>	Gentle massage with Luke warm oil was given for 20 minutes per day.	14 days
2	<i>Sarvanga Vashpa Swedana</i> (sudation therapy)	<i>Dasha moola Kwath</i>	Sudation therapy was given with the steam of Dashmoola Kwath for 10 minutes or as long as the patient feels comfortable.	14 days

**Table no. 3 : Posology of Drugs used in the study:**

No.	Name of drug	Dose	Anupan	Duration
1.	<i>Trayodashanga Guggulu</i>	2 gm daily in three divided doses ( 4 tablets each of 500mg)	Lukewarm water	14 days
2.	<i>Eranda Taila</i> (castor oil)	10 ml twice a day morning and night empty stomach	Lukewarm water	14 days

**Table No. 4: Qualities of ingredients of Trayodashnag Guggulu**

Sl. no.	Name	Botanical name	Rasa	Guna	Virya	Vipaka	Karma
1	Abha	<i>Acacia arabica Wild.</i>	Kashaya	Guru, Ruksha	Sheeta	Katu	Kaphapitta Shamaka, Snehana and Kaphagna
2	Ashwagandha	<i>Withania somnifera Linn.</i>	Kashaya, Tikta	Laghu, Snigdha	Usna	Madhura	Kaphavatashamaka, Balya, Rasayana, Vednashamaka and Shotha hara
3	Hapusa	<i>Juniperus communis Linn.</i>	Katu, Tikta, Kashaya	Guru, Ruksha, Teekshna	Usna	Katu	Kaphavatashamaka, Shoolahara and Naditanrottejaka
4	Guduchi	<i>Tinospora cordifolia Wild.</i>	Katu, Tikta, Kashaya	Laghu	Ushna	Madhura	Tridoshaghna, Balya, Rasayan
5	Shatavari	<i>Asparagus racemosus Wild.</i>	Madhura, Tikta	Guru, Snigdha	Sheeta	Madhura	Vatapittashamaka, shotha hara, Nadi bala prada
6	Gokshru	<i>Tribulus terrestris Linn.</i>	Madhura	Guru, Snigdha	Sheeta	Madhura	Vatapittashamaka, Vedanasthapaka, Vatashamaka Anulomana, Shothahara
7	Vridhdharu	<i>Argyreia speciosa Sweet.</i>	Katu, Tikta, Kashaya	Laghu Snigdha	Ushna	Madhura	Kaphavata Shamaka, Anulomana, Rasayana Nadi Balya
8	Rasna	<i>Pluchea lanceolate Oliver &amp; Hiem</i>	Tikta	Guru	Usna	Katu	Kaphavatashamaka Vedanasthapana, Vataghna Vedanashamaka

9	Shatahva	<i>Anethum sowa</i> Kurz.	Katu, Tikta	Laghu, Teekshna	Ushna	Katu	Kaphavatashamaka, Vatanulomaka, Vedana sthapaka
10	Shati	<i>Hedychium spicatum</i> Buch-Ham	Katu, Tikta, Kashaya	Laghu, Teekshna	Anushna	Katu	Kaphavatashamaka
11	Yavani	<i>Trachyspermum ammi</i> Linn.	Katu, Tikta	Laghu, Teekshna	Usna	Katu	Kaphavatashamaka, Shoolprashmana Vatanulomana
12	Nagara	<i>Zingiber officinale</i> Roxb.	Katu	Laghu, Snigdha	Usna	Madhura	Kaphavatashamaka, Vatanulomana, Aamdoshahara
13	Kaushika	<i>Commiphora mukul</i> (Hook ex stocks)	Tikta, Katu, Kashaya	Ruksha,	Ushna	Katu	Tridoshaghna, Vedanasthapana Shothhara, nervine tonic
14	Goghrita		Madhura, Katu, Tikta	Snigdha, Sheeta	Sheeta	Madhura	Tridoshaghna, Agnivaradhaka,

### Outcome Measure And Follow Up

For pain assessment, VAS score and Oswestry Disability Score was done. Weekly assessment of pain and SLR was done. There was a remarkable improvement in his condition and after two weeks of hospital stay his SLR test was 90 degrees in both lower limbs and mild pain in the lower back only after walking or climbing stairs. His condition was satisfactorily stable during the follow up period of two months.

**Table No. 5: Assessments obtained before and after treatment:**

DATE	VAS Score	ODI Score	SLRT
13 <sup>th</sup> March 2019(before treatment)	10	62%	Left – 0, Right -50
20 <sup>th</sup> March 2019	7	54%	Left – 40, Right -70
28 <sup>th</sup> March 2019	3	32%	Left – 90, Right -90
5 <sup>th</sup> April 2019 (first follow up)	3	32%	Left – 90, Right -90
VAS – Visual analog score , ODI Score – Oswestry Disability Index , SLRT – Straight Leg Raising Test			

### Discussion

*Abhyanga* (Therapeutic massage) is used to produce relaxation and strength to the muscles. In this process after applying medicated oil, gentle message of body is done. *Laghuvishagarbha* Taila is used in all the *Vata Vyadhi*. *Swedana* is very effective treatment for *Vata Kapha Dosha*. This procedure eliminates stiffness, coldness, heaviness, and promotes sweating. *Dashmoola* has *Shothahara* properties. In a study it has been concluded castor oil in dose of 0.9 ml TDS is efficacious in management of osteoarthritic pain with no adverse effects . Ricinoleic acid, the main component of castor oil, has been studied extensively in an experimental model for its anti-inflammatory action due to its inhibitory action on phospholipase A2, leukotriene B4. It alters mucous membrane permeability, stimulates adenyl cyclase-cyclic AMP system , .A study showed chemical capsaicin- and acetic acid-induced and thermal pain were reduced by ricinoleic acid to an extent similar to capsaicin. Effect was may be due to the peripheral depletion of substance P in inflamed paws indicating a probable reduction of substance P in the periphery or that it is acting through VR1 (Vanilloid receptor 1) which is a critical mediator of thermal nociception following topical application . Ricinoleic Acid is chemically similar to prostaglandinE1 . In Ayurveda it has been mentioned that Erand Tail is *Vata Kapha Dosha Hara* and it pacifies the perturbed *Dosha* in lower part of body and can used in management of Gridhrasi. Sopha (edema ) is always associated with *Vata* and *Kapha Dosha* because there is mentioned in *Ayurveda* classis two type of *Ghridhrasi* one is *Vata* second one is *Vata-Kaphaja*.

**Trayodashang Guggulu** can be drug of choice in *Gridhrasi* which is named as because it contains thirteen ingredients. Most of the ingredients of *Trayodashang Guggulu* having the property of *Vatakaphahara* and *Vatanuloman*. Most of ingredient of *Trayodashang Guggulu* is *Rasayan* and *Balya* in its nature strengthen nerves. Thus, it is not only helpful in pain management but also helps in progress of the symptoms of this.

## Conclusion:

In modern era due to life style changes people are not focusing on health and resulting the ill condition. Due to wrong postures, improper exercises, disturbed sleep pattern, hours of commute, problems like Gridhrasi is very common. Conservative management by contemporary medicines have lots of side effects and those are not cost effective as well. Traditional system of medicine definitely effective in this type of condition without any side effect.

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## Case Report

# Ayurvedic management of Sub-Acute Pyelonephritis: A case report

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### Abstract

In *Ayurvedic* text *Sushruta samhita* most of the urological disorders are included in *Mutraghata/mutrakricha* and *Prameha*. Texts have wide description of these diseases in detail. Pyelonephritis is the disease of kidney where infection spreads from below to upwards. It can presents with fever, vomiting, frequent burning urination, abdominal pain which radiate to flanks and back of affected sites. In *Ayurveda* the condition is similar to the *Mutraghata* and *Prameha*. This is a case report of a 29 yrs old male bodybuilder patient, who came with complaint of pain in bilateral flanks, frequent burning urination and low grade fever. Ayurvedic medicines were used for above condition. The results were very encouraging.

**Keywords:** *Mutraghata, Pyelonephritis, Prameha*

### Introduction

Urinary tract infections (UTIs) include cystitis and Pyelonephritis<sup>1</sup>. Acute Pyelonephritis is an infection of the upper urinary tract, specifically the renal parenchyma and renal pelvis. Acute Pyelonephritis is considered uncomplicated if the infection is caused by a typical pathogen in a patient with compromised immune system who has normal urinary tract anatomy and renal function. A complicated Pyelonephritis is said to be present when it occurs in a patient with a structural or functional abnormality of the genitourinary tract and it leads to increase in the risk of unsuccessful treatment.

Acute Pyelonephritis<sup>2</sup> (APN) is a well-known disease, described extensively in literature. Earliest citing of the condition dates back to ancient Egypt, highlighting the destruction of the kidney parenchyma and its outcomes. In spite of this long history, the nomenclature of APN is still controversial, and the semantic ambiguities can still cause confusion.

Women are approximately five times more likely than men to be hospitalized with this condition however they have less mortality rates than men attributable to Pyelonephritis<sup>3</sup>.

APN is subdivided into uncomplicated and complicated. Severity of PN cannot be assessed by clinical or laboratorial parameters alone, radiological imaging such as Ultrasound (USG) abdomen, Computed Tomography (CT) is required to know the nature, extent and severity of disease and for planning interventions.<sup>4</sup>

**Clinical Features:** The clinical spectrum of acute Pyelonephritis is wide, ranging from a mild illness to sepsis syndrome. Mild Pyelonephritis can present as low-grade fever with or without lower-back or costo-vertebral angle pain, whereas severe Pyelonephritis can manifest as high fever, rigors, nausea, vomiting, and flank and/or loin pain. Symptoms are generally acute in onset, and symptoms of cystitis may not be present. Fever is a distinguishing feature between cystitis and Pyelonephritis. Symptoms suggestive of cystitis (dysuria, urinary bladder frequency and urgency, and suprapubic pain) may also be present. In diabetics a rare but dreadful complication might occur which is called as emphysematous Pyelonephritis. This is an acute and severe infection of the renal parenchyma and peri-renal tissue, which results in gas within the renal parenchyma, collecting system or perinephric tissue. It is a life threatening condition if not treated promptly. Xanthogranulomatous Pyelonephritis occurs in association with chronic urinary obstruction (usually by staghorn calculi), together with chronic infection. It leads to granulomatous inflammation and destruction of renal tissue.

The clinical presentation of the Pyelonephritis may be correlated with the *Usnavaat* and the *Mutroksaad*

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(*pitta* and *kaphjanya*) described by Acharya Sushruta<sup>5</sup> in *Sushruta samhita*. The causative factor for *Usnavaat* described by Sushruta are excessive exercise, longtime walking in bright sunlight. Due to above region the *Vata* and *Pitta dosha* aggravates and produce the *Usnavaat*. In *Mutroasad* the causative *doshas* are *Pitta* and *Kapha*. Achary Sushruta advocated the general treatment<sup>6</sup> of *Mutraghata* by the different *Kashay, kalka, ghrta, dugdha, kshara, aashava, arishta, upnaah, sweda, and bastichikitsa*. These different *kalpanas* (formulations) are prepared with the various *Ashmarinashak* (Lithotriptic) drugs. The medicines used in this case study are described by Acharya Sushruta for the management of different *mutra-ashmari*.

## Case report

A 29 yrs old male professional bodybuilder patients came to OPD with complaint of pain in B/L flank, frequent burning urination and low grade fever since 1month. Patient has history of taken steroid upto 3 months for body building 6 month ago. Details of steroid were not available. No history of Diabetes Mellitus, Hypertension or any other chronic ailments. Patient was diagnosed as APN had taken some allopathic medicine for 10 days but condition was not cured completely so he visited our hospital. Blood test reveals WBC counts-11x10<sup>3</sup>, Hb-8.9gm%, Blood urea 60mg/dl, Serum Creatinine 1.8 mg/dl, ESR-26mm/1hr. Urine examination reveals turbid, dark yellow color, 100/120 pus cells. Ultrasound of KUB region reveals sub-acute Pyelonephritis. The patient was advised to take plenty of water and following *Ayurvedic* medicine for four weeks.

*Gokshuradi guggulu*: 2 tab twice daily after food.

*Syp. Neeri KFT*: 3 tsf twice daily after food.

*Chandraprbha vati* 2: tab twice daily after food.

After four weeks of treatment patient was again assessed. He was symptom free and the WBC-6x10<sup>3</sup>, Hb-12.50 gm%, ESR-10mm/1hr, Blood urea 32mg/dl, Serum Creatinine 1.0 mg/dl Urine became light yellow color, clear. Pus cells in urine 3-5. USG not repeated because patient was asymptomatic and patient refused to do.

## Discussion

When patient came to OPD he was not in acute phase of Pyelonephritis. He already has taken antibiotics for one week. He was in the sub acute phase of Pyelonephritis. The possible reason behind the infection may be the steroid which he consumed before six months for body building. Steroids compromise the immune system of the body that leads to the infection. The medicines used in the treatment of patient are combination of multiple drugs. Most of the drugs of combination are advised for the treatment of renal calculus and mentioned in *mutraghat* and *prameha chikitsa* in *Sushruta samhita*. The main drug of *Gokshuradi guggulu* is *Gokshur (tribulus terrestris)*, and from *Neeri-KFT* the main drugs are *Punarnava (Boerhaia diffusa)*, *panchtrinmool* (classical combination of five drugs), *kansi (cichoriou mintybus)*, *Makoya (solanumnigrum)*, *Giloe (tinosporia cardifolia)*, *kamalkandi (nelumo nucifera)*, *Palaspushpa* and *Gokshur* etc. the main composition of *Chandraprabhavati* is *Shilajit (Asphaltum punjabianum)* and *Guggulu (commiphora mukul)*. *Gokshuadi guggulu* and *Chandraprabha vati* these are the two classical drugs mention in *Ayurvedic* text in treatment of *Prameha/Mutrarog*<sup>7</sup> (urinary disorders) and *Neeri KFT* is branded drugs by AIMIL pharmaceutical limited. The possible mode of action of the drugs is that these drugs stimulate the renal parenchyma cells for enhancing active and fast filtration that produce more urine. That produces a kind of flush action for kidneys as well as whole circulating fluid, which reduces the loads of pathogens. *Gokshura*<sup>8</sup> is well known for diuretic action. The drugs like *Giloe*<sup>9</sup> & *Shilajit*<sup>10</sup> are very good immune booster which augment the defense mechanism of the body to stop the pathogens. The drug like *Guggulu*<sup>11</sup> is a potent anti-inflammatory, analgesics, and antipyretics which reduce the pain, malaise and fever.

## Conclusion

Pyelonephritis is an infective disorder as per modern medical science. In the acute phase antibiotics drugs are required. In sub-acute condition *Ayurvedic* medicine have very good effect in clearing of the pathogens from kidneys because of enhancing the glomerular system of kidneys by diuretic action and boosting the renal function. These drugs enhance the immune system to improve the defense mechanism of body. So the results of this particular study, it was observed that *Ayurvedic* medicine work very efficiently to improve this particular condition. However to get more accurate and firm result study should be carried in multicenter with large sample size.

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## Case Report

# An Ayurveda Approach to Anidra w.s.r. to Anxiety induced Insomnia: A Case Report

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## Abstract

*Ahara* (food), *Nidra* (sleep) and *Bramhacharya* (celibacy) in *Ayurveda* are collectively described as the *Trayoupastamba* (three supportive pillars) of the life. Hence forth, sleep is one of the essential factors for a healthy life. *Ayurveda* also mentioned *Nidra* as one of the important dimensions for happiness and good health which finally leads to relax mental state. *Anidra* can be clinically correlated with insomnia. Insomnia is the most common sleep problem worldwide. Long term manifestation of insomnia can lead to many psychosomatic disorders like fatigue, high blood pressure, lack of concentration and ultimately reduce the productivity and hampers the quality of life. The national sleep foundation of America estimates that at least 1/3rd people of world suffer from sleep disorders. *Ayurveda* advocates some fruitful *Panchkarma* therapies for the treatment of *Anidra*. Hence an effort has been made to evaluate the efficacy of *Shirodhara* and *Shamana Chikitsa* in the management of the *Anidra* (insomnia).

This is single case study of 37 years old male suffering from sleeplessness for 10 years. He had associated complaints of excessive thoughts, indigestion and headache. Patient sleep was markedly disturbed leading to stress and anxiety hence he visited to the allopathic hospital and started anti-psychotic and sedatives drugs. Patient took medication regularly for 8 years but the symptoms didn't get subsided. Treatment given was *Shirodhara* with *Ashwagandha Taila* for 45 min for 14 days along with *Shamana Chikitsa*.

The therapy provided marked relief in stress and sleeplessness and patient quality of life was improved. On the basis of this case study it can be concluded that *Panchkarma* can play a vital role for the effective management of *Anidra* (insomnia). Since the single case is not enough more rooted study in this is required.

**Keywords** - *Anidra*, *Shirodhara*, *Ashwagandha Taila*, Insomnia

## Introduction

*Ahara* (food), *Nidra* (sleep) and *Bramhacharya* (celibacy) in *Ayurveda* are collectively described as the *Trayoupastamba* (three supportive pillar) of the life<sup>1</sup>. Hence forth, sleep is one of the essential factors to lead a healthy life. *Ayurveda* has mentioned *Nidra* as one of the most important dimensions of health associated with happiness and good health which leads to relax mental state<sup>2</sup>. According to WHO (World Health Organization), health is a state of complete physical, mental, or social well being and not merely the absence of disease or infirmity<sup>3</sup>. In present era due to changing of lifestyle and environmental factors quality of sleep has been disturbed. Good quality of sleep is essential for good health and well being. The disturbance in *Nidra* might be related to the life style, mental tension, change food habits and day to day stress which ultimately disturb the biological rhythm of the sleep. *Acharya Charaka* has described *Anidra* as one of the 80 *Vata Nanatmaja Vikara*<sup>4</sup>. Some *Acharya* also mentioned *Anidra* as *Lakshana* of some disease<sup>5</sup>. *Anidra* can be correlated with insomnia on the basis of sign and symptoms as mentioned in ancient *Ayurveda* literatures. Insomnia also known as sleeplessness is a sleep disorder in which people have trouble sleeping<sup>6</sup>. Insomnia is the inability to obtain an adequate amount or quality of sleep. Trouble can be falling asleep, remaining asleep, or both. People with decrease sleep don't feel refreshed when they wake up. Now a day's insomnia is a common symptom affecting millions of people. Insomnia may be caused by many conditions like psychological causes- fear, anxiety, anger etc<sup>7</sup>. Insomnia often leads to fatigue, lack of energy, difficulty concentration, irritability etc. Women are more commonly affected than men, and its incidence is found to be increased with increase in age<sup>8</sup>.

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Approximately 30% of general population are affected from insomnia<sup>9</sup>. One out of every twenty Indian suffers from sleep disorder. 16% of the population suffered from insomnia in India. Different findings suggest that, sleeplessness is an epidemic that affects an estimated 150 million in developing world. In 20 years, over 260 million people will experience sleep disorders. 5% to 6% of people aged 50 years and above are affected by sleep disorders in India<sup>10</sup>.

Different types of tranquilizers are prescribed for the management of insomnia continuous and long term of which is having various adverse effects including drug dependency. In such a scenario there is a need for the efficient management of insomnia in a natural way without leading to further adverse effects. *Ayurveda* classics explains different modality for the management of *Anidra* (Insomnia). *Ayurveda* advocates some fruitful *Panchkarma* therapies like *Murdhni Taila* which include *Shiroabhyanga*, *Shiroshaka*, *Shiropichu* and *Shirobasti*. Hence an effort has been made to evaluate the efficacy of *Shirodhara* and *Shamana Chikitsa* (Internal medicine) in the management of the *Anidra* (Insomnia).

## Case Report

This is single case study of 37 years old male (OPD Reg. No. 29321022019) suffering from sleeplessness for 10 years. He had associated complaints of excessive thoughts, Constipation, tiredness and headache. Patient sleep was markedly disturbed leading to excessive stress and anxiety hence he visited to the allopathic hospital and started anti-psychotic and sedatives drugs. Patient took medication regularly for 8 years but the symptoms didn't get subsided. Hence patient came for the Ayurveda treatment and visited the Panchkarma OPD, NIA, Jaipur. There was no any significant past history of HTN, DM, traumatic injury etc. *Astavidha Pariksha* [Table No. 1], *Manas Bhav Pariksha* [Table No. 2] and systemic examination [Table No. 3] was done.

**Table No. 1: Astavidha Pariksha**

<b>Nadi</b>	74bpm
<b>Mutra</b>	Samyaka
<b>Mala</b>	Nirama
<b>Jivha</b>	Nirama
<b>Shabda</b>	Spasta
<b>Sparsha</b>	Samshitoshna
<b>Drik</b>	Spasta
<b>Akriti</b>	Madhyam

**Table No. 2: Manas Bhav Pariksha**

<b>Bhaya</b>	Absent
<b>Krodha</b>	Present
<b>Shoka</b>	Absent
<b>Chinta</b>	Present

**Table No. 3: Systemic examination**

Blood Pressure	126/80 mmHg
Temperature	98.6 0F
Pulse	74/bpm
Respiratory Rate	18/min.
Weight	72 kg
Height	5'9"
Gait	Normal
Oedema	Absent

**Investigation** - Haematological investigation was within normal limit. The case was diagnosed as *Anidra* (Insomnia) on the basis of signs and symptoms. Patient was admitted at male IPD ward, Panchkarma department of NIA. The treatment was given according to Ayurveda principles.

### Intervention

*Shirodhara* along with the *Shamana Chikitsa* was given to the patient [Table no. 4]. *Shirodhara* is a type of *Murdhani Taila* that involves gentle pouring of warm liquids over the forehead. It is the process in which medicated oil is poured in a continuous stream of drip on the forehead in a specific manner and height. *Shirodhara* therapy is extensively used for alleviation of psychic and psycho-somatic ailments. In this study *Ashwagandha Taila* was used for the *Shirodhara* procedure.

Proper counselling about the procedure was done to patient. Before procedure vitals of the patient was measured. Procedure was done during the morning hours. *Ashwagandha Taila* was kept in *Dharapatra*. Eyes of the patient was closed with the help of cotton plug and bandage to prevent the flow of oil inside the eyes. *Dhara* was poured continuously on forehead neither very fast nor very slow. Luke warm temperature of oil was maintained throughout the whole procedure. *Dharapatra* was moved in the pendulum manner starting from one lateral side to the other lateral side during the pouring of oil. The Oil was collected in another vessel and was used to refill the *Dharapatra* before it becomes empty. Procedure was done for 45 min till 14 days. The oil was changed on every 7<sup>th</sup> day. Total 2 litre of *Ashwagandha Taila* was used during the procedure. *Shamana Chikitsa* was given continuously 14 days during the procedure and after the procedure to till follow up.

Table No. 4 : Intervention

S. No.	Date of start	Drug	Dose	Frequency
1	12/3/2019	<i>Sarswatarista</i>	4tsf	BD after meal
2		<i>Bramhi Ghrita</i>	10gm	OD after meal at night
3		<i>Shankha Bhasma Bhuvneshwar Churna</i>	250mg 4gm	BD before meal
4		<i>Ashwagandha Taila (For Shirodhara)</i>	2 litre	At morning time

Follow up of the patient was done after 15th day of completion of procedure.

### Assessment

Assessment was done after the completion of procedure and after the follow up. Both subjective as well as clinical improvements were employed for the assessment of the impact of the procedure. All symptoms which were selected for assessment, their improvements were thoroughly examined and the severity of each of them was rated before and after the trial of the procedure. Grading was done for the assessment [Table no. 6]. Patient was assessed from subjective criteria [Table No. 5] and also from PSQI scale [Table No7]. *Krodha* and *Chinta* of the patient was markedly reduced.

Table No. 5: Assessment after treatment and follow up

S. No	Symptoms	BT	AT	After follow up
1.	<i>Jrimbha</i> (Yawning)	1	1	1
2.	<i>Tandra</i> (Drowsiness)	0	0	0
3.	<i>Arati &amp; Klama</i> (Fatigue & Inertness)	2	1	0
4.	<i>Shirashoola</i> (Headache)	2	1	0
5.	<i>Ajima -Agnimandhya</i> (Indigestion)	3	0	0
6.	<i>Malabaddhata</i> (Constipation)	2	0	0
7.	Quality of sleep	1	2	3

**Table No. 6:**Grading

Sleep	Gradation
No sleep	0
Mild sleep (1-3 hrs)	1
Moderate sleep (4-5 hrs)	2
Good sleep (More than 6 hrs)	3
Quality of sleep (Is sleep continuous/disturbed)	Gradation
Continuous sleep	0
Severely disturbed sleep(Disturbed at 4-5hrs)	1
Moderate disturbed sleep(Disturbed at 3-4hrs)	2
Mild disturbed sleep(Disturbed at 1-2hrs)	3

**Table No 7:** Sleep quality index (PSQI Scale)

Component of PSQI scale-

Component	Interpretation	B.T.	A.T.	After follow up
C1	Subjective sleep quality	3	2	2
C2	Sleep latency	3	1	1
C3	Sleep duration	2	1	1
C4	Sleep efficiency	3	2	2
C5	Sleep disturbances	2	1	1
C6	Use of sleep medication	3	2	1
C7	Day time dysfunction	4	3	2

Global PSQI scale is the sum of all the seven components of PSQI. The total score of "5" or greater is indicative of poor sleep quality.

## Discussion

Insomnia is a sleep disorder in which people have trouble to sleep. Physiologically it can be defined as the state of decrease functioning of thalamus and basal fore brain. Pharmacological studies suggest the role of different neurotransmitter for the disturbance of sleep. Catecholamine and serotonin level plays the vital role in the promotion of sleep.

*Shirodhara* is a procedure which comes under the external application of oil over the fore head mostly used for neuromuscular relaxation and nourishment. *Shirodhara* is a relaxation therapy which relieves mental exhaustion as well as pacifies the aggravated *Vata Dosha*. It helps to normalize the function of central nervous system by relaxing the nervous system and balancing the circulation of blood in the head. *Shirodhara* acts as anti-anxiety and stress relaxant and these effects are mediated by the brain wave coherence, Alfa waves, and a down regulation of the sympathetic outflow<sup>11</sup>. As it is proven that local ointments after application passes through stratum corneum and reaches the target organ same wise the continuous pouring of *Ashwagandha Taila* may also absorbed and stimulates the brain cortex, corrects the deficiency of neurotransmitter thus producing tranquilizing effect. *Shirodhara* also pacify the disturbed *Manasika Bhava* like *Krodha, Chinta, Bhaya*, etc promoting mental health<sup>12</sup>. *Shirodhara* produces calming effect as after procedure it makes patient relax and induces sleep may be due to raise in serotonin level. *Shirodhara* when continuously poured over fore head with particular pressure produces a kind of vibration. These vibrations reaches to the target organ through cerebrospinal fluids thus stimulating the thalamus and basal fore brain and helps in the correction of catecholamine and serotonin level<sup>13</sup>. Correction of neurotransmitters helps in promotion of sleep.

In *Anidra* (insomnia) the main vitiated *Dosha* is *Vata*, so balance of *Vata Dosha* is an important thing to treat in insomnia. *Ashwagandha Taila* having *Vatahara* properties helps in the suppression of symptoms like excessive thoughts, sleeplessness and headache. Main component of above oil is *Ashwagandha* which is having *Nadibalya*, *Mashtiska Shamak*, *Nidrajana* and *Vatahara* properties. *Bhuvneshwar Churna* and *Shankha Bhasma* were given to correct the *Agni* of the patient and to improve digestion. As per *Ayurveda* text medicines like *Bramhi Ghrita*, *Sarswatarista* are some of the widely indicated formulation for Psychiatric illness like *Unmada*, *Atatvaabhinivesha* etc. *Brahmi* is a proven brain tonic, act as neuro-activator and helps to improve mental & intellectual activity, further when administered in the form of ghee it is easily absorbed due to lipophilic nature. *Sarswatarista* was used as *Medhya Rasayana*. *Sarswatarista* having *Tridoshara*, *Rasayana*, *Ojaskara* and *Medhya* properties which provide proper nutrition to the brain and stimulate its function. All these together helps to improve brain functioning and provides nourishment to brain which is responsible for the suppression of aggravated *Vata Dosha* thereby overcomes stress & anxiety, calm down the mind and in turns improves quality and duration of sleep.

## Conclusion

In overall assessment it was found that *Shirodhara* with *Ashwagandha Taila* along with *Shamana Chikitsa* have beneficial role for the management of *Anidra* (Insomnia).

**Conflicts of Interest:** Not any

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**Case Report**  
**Verruca Vulgaris of scalp annihilated by Homoeopathic Medicine**  
**- A case report**

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### Abstract

Verrucas (warts) are cutaneous lesions caused by human papilloma viruses which can occur on any part of the body by skin contact directly or indirectly. Treatments available are mostly invasive i.e. either surgical excision or external application of some corrosive material. Only judicious use of homoeopathic medicines can be effective in absolute eradication of these types of pathological growths. A male patient, 51 years of age, who was coming to one of the *Swasthya Rakshan* camp, complained of fleshy, sessile, indurated mass on the upper occipital part of the scalp which was growing conspicuously for the last 6 months. After detailed case taking, miasmatic evaluation and repertorization, Carcinodin was given in centesimal potency. In a span of four months, the verruca was nowhere to be found on the scalp.

**Keywords** - Carcinodin, Case report, Individualization, Scalp, *Swasthya Rakshan* camp, Verruca.

### Introduction

Verruca commonly known as warts is caused by infection of skin by human papilloma virus (HPV: ds- DNA viruses growing only in the epidermis). It can occur in adults and children and infection is transmitted by direct contact although it has a low infectivity and therefore a casual contact may not result in the local malady<sup>1</sup>. HPV infections may be clinical, subclinical or latent<sup>2</sup>. Clinical types are visible to the naked eye and can be diagnosed correctly by history and physical examination alone<sup>3</sup>. They can manifest in different forms and on basis of location they can be categorised as - verruca vulgaris (sessile, dome-shaped and usually a centimetre in diameter)<sup>4</sup>, palmoplantar warts (multiple, confluent/discrete, painless) verruca plana (flat, smooth papular), filiform warts (thread like/finger like projections), epidermo-dysplasia verruci formis (genetically predisposed, extensive lesions), and anogenital warts (sexually transmitted)<sup>5</sup>. Their morphology and texture may be soft, hard, flat, smooth, rough, scaly etc. Warts also have diagnostic value in distinguishing different stages in a disease. The verruca vulgaris appear at the time of second dentition in cases of children suffering from hereditary syphilis. The verruca filiform is comes as a tertiary lesion in an acquired form of syphilis. The verruca plana juvenilis (pigmented, disseminated and in irregular unilateral groups) is another form found on the back of hands and faces of children and young people<sup>6</sup>. Management of warts is based on their clinical appearance, location and the immune status of the patient<sup>2</sup>. The various modalities available for the treatment of warts in various systems of modern medicine include electrocoagulation, cryosurgery, curettage, applying salicylic acid, liquid nitrogen and podophyllin, CO2 laser surgery and interferon injection<sup>7</sup>.

### Case Report

A male patient (PT) of 51 years of age came to the OPD of *Swasthya Rakshan* camp(note),complained of fleshy, sessile, indurated mass on the scalp(at the upper occipital area) which has developed to a size of 3cm x 2 cm within a period of 6 months. Surface was rough and margins diffuse. There was no pain, itching or burning sensations. Bleeding in tinge was found occasionally when got struck by comb or hand accidentally.

#### Past history

Patient has history of chicken pox at the age of 14 years which healed spontaneously with proper rest and diet. He has tendency to develop vesicular eruptions after mosquito bite.

#### Family history

Grandfather died of throat carcinoma (cannot exactly specify whether it was pharyngeal or laryngeal or anything else). Mother suffers from uric acid diathesis and obesity. Father is also suffering from diabetes mellitus for last 10 years.

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**Personal history**

Patient was government employee at Group-B level in an administrative section. He was a singer also and occasionally he conducts stage performances on contract basis.

**Generalities**

**Physical generals**

His appetite was good and regular. There was a strong desire for meat and aversion towards fruits and vegetables. He also had the predisposition of developing flatulence in abdomen towards evening. Bowel movements were irregular with so much hard stool that at times he was reluctant to go for defecation. Patient also had tendency of sweating all over the body but especially during sleep. Sleeplessness was prominent due to activity of thoughts which keeps on coming to his minds on lying down and hence on waking feels un-refreshed. He always felt better in winter season, cannot tolerate the heat in any form and hence to be considered as hot patient.

**Mental generals**

Mentally he was very joyful and becomes more cheerful during stormy and windy weathers. He felt more energised and singing spontaneously comes to him during such conditions. He described himself as an ‘Explorer’ who always wants to travel to new places to see original facts and to learn innovative things. At the same time he was a perfectionist, very particular about his physical presentations and performances. In spite of all this positivity in the mental sphere he had a strong fear of having cancer. Whenever he had problems regarding the voice like hoarseness, cracking of voice etc he got anxious. He kept on thinking that it might turn fatal and he may die because of throat cancer just like his grandpa.

**Local and systemic examination**

On inspection fleshy mass (on the upper occipital area on the left side) was visible on the removal of the hair with hands. It was reddish on appearance. No ulcerative spot on the mass was detected. On palpation, it was sessile, fixed to skin of the scalp, no fluctuation found and was having firm consistency. Tongue was clean and moist. Skin was having numerous black moles all over.

**Analysis of the case**

After analysing the symptoms of the case, the characteristic mental and physical generals and particular symptoms were considered for framing the totality. Fear of cancer, cheerful mood during thunderstorm, desire to travel, and fastidiousness were the mental generals. Desire for meat, aversion to fruits and flatulent abdomen during evening, hard stool, profuse perspiration mainly during sleep, unrefreshing sleep, sleeplessness from activity of thoughts and thermal reactions of being a hot patient were the physical generals in the totality. Regarding the particular symptoms, warts on scalp and numerous black moles all over body were considered.

**Miasmatic analysis**

Miasmatic evaluation of all the presenting symptoms was done with the help of “Chronic miasms in homoeopathy and their cure with classification of their rubrics/symptoms in Dr. Kent’s repertory by Dr. RP Patel” showed the predominance of psoricmiasm with syphilitic adulteration<sup>8</sup> hence it is quite rightly stated that the miasm of psora unfolds itself in many countless disease forms in all human race.

Table no 1 -

Symptoms/Rubrics	Miasm
Mind: Cheerful – thunders and lightens; when it (+++)	Psora
Mind: Travelling – desire to (+++)	Psora
Generals: Desires meat (++)	Psora
Generals: Aversion fruits (+)	Psora
Abdomen: flatulence – evening (++)	Psora
Stool: hard (++)	Psora
Stool: odour, offensive (++)	Psora
Sleep: unrefreshing (++)	Latent psora
Sleep: sleeplessness – from activity of thoughts (++)	Psora, Syphilis
Generalities: warm aggravation (+++)	Syphilis
Skin: Warts - bleeding (+++)	Psora

Reportorial analysis

Table no 2 -

Considering the above symptomatology, The Synthesis repertory 9.1 version was selected and RADAR software used for repertorization<sup>9</sup>. Therepertorisation chart is provided above. After repertorisation, many medicines were competing with each other, namely Carcinosis, Sepia, Sulphur, Lycopodium, Causticum, Natrummuriaticum etc. Carcinosis covered maximum symptoms (13) but Sepia and Sulphur scored the maximum (21). But Carcinosis was preferred as evidences stated that it acts favourably and modifies all cases in which history of cancer is present in the family<sup>10</sup>. H/O diabetes mellitus in the family also goes in favour of the prescription<sup>11</sup>. Moreover there are evidences of successful prescription of carcnosis on warts. A pedunculated painless wart on anterior side of neck for one year was cured by Carcinosis 1M in two months<sup>12</sup>. Two doses of Carcinosis 1M given in sac lac pulvis was prescribed, to be taken in empty stomach, OD x 2 days, followed by placebo for one month on 20.08.15,after considering the reportorial totality and miasmatic background. Unfortunately no picture was documented on day one. The following pictures are from day two onwards.

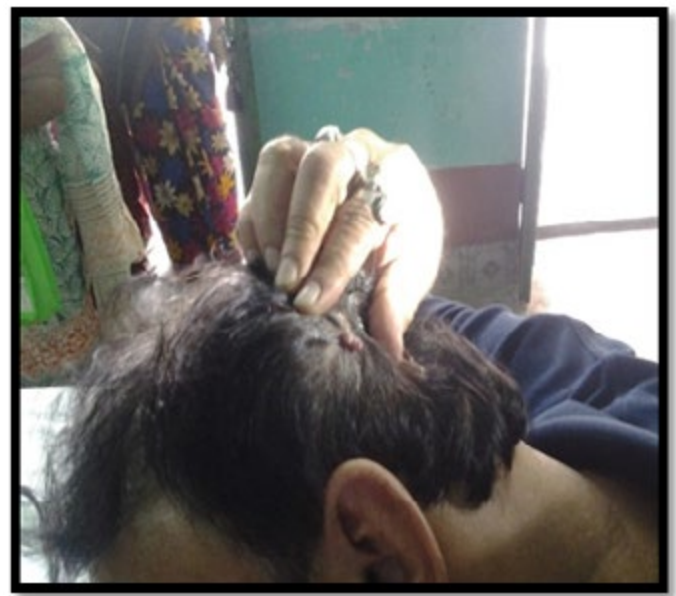
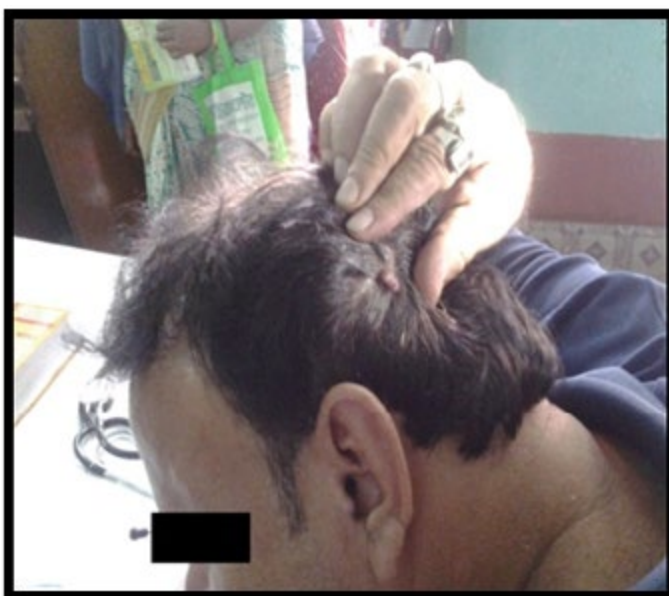
Follow-Up Date	Indications for Prescription	Medicine with Doses
1 <sup>st</sup> follow-up 01/10/15	Picture 1 – bleeding spots still found. Size almost the same. No such remarkable improvement.	Carcinosis 1M/ 2 doses in sac lac pulvis OD x 2 days, followed by one month placebo.



Follow-Up Date	Indications for Prescription	Medicine with Doses
1 <sup>st</sup> follow-up 01/10/15	Picture 2 and 3 – bleeding no more occurring. Margins seem to condense and the mass seemed to shrink.	Placebo continued for one more month for once daily.



Follow-Up Date	Indications for Prescription	Medicine with Doses
3 <sup>rd</sup> follow-up 03/12/15	Picture 4 and 5 – no bleeding episodes. The growth decreased to a great extent and almost condensed to pea-sized lump.	Placebo continued for one more month for once daily.





Follow-Up Date	Indications for Prescription	Medicine with Doses
4 <sup>th</sup> follow-up 07/01/16	Picture 6 – growth vanished 2 weeks earlier and patient came just to inform.	No medicine is prescribed



## Discussion

Homoeopathic treatment of warts is mainly through constitutional medicine i.e. medicine selected is based on characteristic history and totality of the symptoms obtained from complete study of the patient as an indivisible whole<sup>13</sup>. It can be classified as external local malady which refers to one-sided diseases having alterations and ailments on the outer parts of the body. Their cause is an internal suffering requiring homoeopathic medicines taken internally only (no external means should be directly applied)<sup>14</sup>. Several published articles have shown the effectiveness of homoeopathic treatment on warts. Out of 62 cases in from an outpatient study, in 47 cases warts disappeared completely and medicines prescribed was mainly Thuja, Ruta, Antim crud, Calc carb, Nitric acidum and Opium in 30<sup>th</sup> and 200<sup>th</sup> potency<sup>15</sup>. Five successful case reports on warts located in left and right arms, nose, upper lip, and cheek was reported in a journal. Medicine prescribed was Thuja (2 cases) and Causticum (3 cases) in centesimal and LM potency<sup>16</sup>. Another such publication of two case reports on warts located over feet and eyelid was also found in another journal. In these cases, the medicines were Nitricum acidum and Causticum in 30<sup>th</sup> potency. In both the case report publication, evidence-based documentation was done by photography before and after the treatment<sup>17</sup>. A study of randomized double-blind placebo-controlled trial to evaluate the efficacy of a homoeopathic treatment of plantar warts which surprisingly concluded that homoeopathic treatment was no more effective than the placebo. The trial lasted for 6 weeks and the conclusion was surprising for the homoeopaths. The reason behind such a negative result may be due the mode of prescription done as it was a polypharmacy (Thuja 30, Antim crud 7 and Nitricum acidum 7) consisting of 3 remedies. Secondly it is not necessary that these medicines must be effective in all cases of warts. A recent study of homoeopathic treatment for various types of warts found that 18 out of 19 people with plantar warts were cured in on average of 2.2 months. The most common remedy was Ruta (12 out of 19 cases), along with Thuja (3 cases) and Antim crud (2 cases)<sup>18</sup>. From above studies the importance of individualisation is evident and constitutional medicine becomes

the most selected similimum in all occasion. Hence, treatment with a single well indicated remedy as per the characteristic totality is desirable for a favourable outcome.

## Conclusion

Verrucas are expressions of deranged vitality reflected on skin and should not be treated as regional maladies. They have been considered as local maladies and treated accordingly with suppressive applications. They may disappear within months or may take several years and can also recur at times, but a well selected suitable remedy is actually required to cure the lesion in its whole extent.

**Note: Swasthya Rakshan Program has been initiated through Central Council for Research in Ayurvedic Sciences (CCRAS), Central Council for Research in Unani Medicine (CCRUM), Central Council for Research in Homoeopathy (CCRH) and Central Council for Research in Siddha (CCRS) in selected districts/ villages with the objective of promoting health and health education in villages as per the directions of Ministry of AYUSH.**

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## Case Report

# Homoeopathic approach to common viral skin diseases- Case studies

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## Abstract

Skin diseases are among the most common of all human health afflictions and affect almost 900 million people in the world at any time and are associated with disfigurement, disability, stigma and psychological distress. Viral skin diseases range from simple superficial exanthemas to complex systemic diseases affecting people of all ages. The diagnosis is based on typical patterns of presentation, occasionally requires laboratory testing and treatment is based on the patient's comorbidities, the extent, location and progress of the disease. Homoeopathy can play a major role in the treatment of viral skin diseases and it considers the man as a whole while forming the totality of symptoms of a case of disease. Five cases of common viral skin diseases namely Molluscum contagiosum, Herpes zoster, Filiform warts, Digitate wart and Flat warts were treated with internal homoeopathic medicines selected on the basis of totality of symptoms of each case and without any external application. The treatment not only removed the local skin lesions but also showed considerable improvement in the comorbidities of the patient.

**Key words:** Homoeopathic treatment, Individualistic approach, Viral skin disease.

## Introduction

Skin diseases are numerous and a frequently occurring health problem affecting all ages.<sup>1</sup> The Global Burden of Disease project has shown that the skin diseases continue to be the 4<sup>th</sup> leading cause of non-fatal disease burden worldwide.<sup>2</sup> Skin and subcutaneous diseases were the 18<sup>th</sup> leading cause (1.79%) of global Disability-Adjusted Life Year (DALY), of which viral skin diseases accounted for 0.16%.<sup>3</sup> Viruses are obligatory intracellular parasites and viral skin infections occur when a virus penetrates the stratum corneum and infects the inner layers of the skin, resulting in herpes simplex, shingles (herpes zoster), molluscum, warts, etc.<sup>4-6</sup> Some systemic viral infections, like chicken pox and measles, may also affect the skin.<sup>5</sup>

**Wart:** Skin warts are benign tumours caused by infection of keratinocytes with human papilloma virus (HPV), visible as well-defined hyperkeratotic protrusions. They are common throughout the world and are more common in immuno-compromised patient. They spread by direct or indirect contact and are a significant cause of concern and frustrations for patients. Viral warts show acanthosis and hyperkeratosis, usually with the characteristic feature of koilocytosis of upper keratinocytes. Warts on the skin may present in a number of different morphological forms dependent of virus type, body site, environmental influences and immunological status of the patient. They may present as common warts, periungual warts, plantar warts, plane (flat) warts, filiform or digitate warts, etc.<sup>4,5,7</sup> Social activities can be affected or lesions can be uncomfortable and often the treatment available can become painful and frustratingly ineffective.<sup>4</sup>

**Herpes zoster:** Herpes zoster results from reactivation of varicella-zoster virus (that also causes chickenpox). In the beginning one may notice a tingling sensation or burning pain on one side of the body or face. Within days, tiny clusters of red bumps quickly develops into a group of painful blisters and get crusty with pus. Lesions follow a dermatomal distribution, with thoracic and lumbar roots being the most common. Unless the patient is immuno-compromised, the rash almost never crosses the midline of the body (it's unilateral), as it is localized to one nerve root. The area can become very painful, itchy, and tender. Pain severity correlates with the extent of lesions and elderly persons tend to have severe pain.<sup>4</sup> After one to two weeks, the blisters heal and form scabs, the duration depends on patient's age, severity of eruption and presence of underlying immune-suppression<sup>4,5,7</sup> Up to 15% of people with herpes zoster develop deep pain called post herpetic neuralgia that follows after the

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infection has run its course. It can continue for months or even years, especially in older people. The incidence of shingles and of post herpetic neuralgia rises with increasing age. Shingles usually occurs only once, although it has been known to recur, usually in people with weakened immune systems.

**Molluscum contagiosum** – A viral skin infection that causes either single or multiple raised umbilicated, pearl-like bumps (papules), averaging 3-5 mm on the skin. It is caused by closely related types of Pox virus (MCV-1 to MCV-4) and is common in children<sup>4</sup>. It occurs worldwide, but seems much more frequent in geographic areas with warm climates<sup>6</sup>. Usually it is transmitted by contagion through direct contact and can spread on a single individual through scratching and rubbing.<sup>4,5,8</sup> Lesions tend to be more on the face, trunk and extremities. Irritated lesions may become crusted and even pustular, simulating secondary bacterial infection. It has a characteristic histopathology affecting follicular epithelium with presence of Molluscum bodies or Henderson- Paterson bodies in the cytoplasm. The diagnosis of Molluscum contagiosum can be done with distinctive central umbilication of the dome shaped lesion and can be further confirmed with the pasty core when the lesion is expressed, squashed between two microscopic slides, stained with Wright, Giemsa or Gram stain.<sup>4</sup>

Homoeopathy treats the patient, not the disease. So skin manifestations are also to be treated by means of internal medication following the principles of Homoeopathy. In the management of such cases along with the exact character of the local affection, all the changes, sufferings and symptoms observed in the patient are to be taken into consideration for the formation of totality of symptoms. The medicine thus administered internally not only removes the general morbid state of the body but also the local affection at the same time.<sup>9</sup>

## Case Reports

### Case no. - 1

Mrs. R.D. Female, aged 27 years, presented on 04/02/2019 with papular eruptions at the right side of nose since last 7 days. Her symptoms included pain and itching at that part along with sense of dryness. Pain and itching were worse at night. Local examination revealed white papular umbilicated eruptions at the right side of nose with dryness of the part and painful to touch. No excoriation.




History revealed that the patient suffered from jaundice at the age of 14 years, treated by home remedies and recovered.

Patient's appetite was poor with desire for sour things. She was chilly and had tendency to slow healing. She was very sensitive both physically and mentally.

### Diagnosis: Molluscum contagiosum

Symptoms:	5	Remedies:	76	Show Repertorialisation Tools													
				Prescribe													
				Remedy List													
				Record													
				Replace													
				View All													
				More Results													
Remedy Name	Hep	Ars	Sulph	Cham	Arn	Calc	Lyc	Sil	Verat	Ant-t	Acon	Chin					
Totality	8	6	5	4	4	4	4	4	4	3	3	3					
Symptoms Covered	5	3	3	3	2	2	2	2	2	3	2	2					
Kingdom																	
[Phatak ] [Phatak A-Z]Touchy (mentally and physically): (7)	1			1						1	1						
[Phatak ] [Phatak A-Z]Healing difficult (wounds, ulcers etc.): (15)	2	2	2	2	2	1	2	1									
[Phatak ] [Phatak A-Z]Cold Agg. (Easily chilled, lack of vital heat): (53)	2	3	1			3	2	3	3	1							
[Phatak ] [Phatak A-Z]Cravings:Sour things: (17)	2	1	2	1	2				1	1	2						
[Phatak ] [Phatak A-Z]Eruptions (tendency to):Touch Agg.: (9)	1											1					

After repertorization through Phatak repertory <sup>10</sup>, consulting Materia Medica and considering the whole case Hepar sulphuris was chosen.

Date of visit	Symptoms with intensity in Numeric Rating Scale – NRS (0to10)	Treatment	Photograph
04/2/2019	<ul style="list-style-type: none"> <li>• Papular eruption at the right side of nose. (NRS- 7)</li> <li>• Part very sensitive to touch and painful. (NRS-9)</li> <li>• Itching at that part &lt; night. (NRS-5)</li> <li>• Sense of dryness, &lt; night. (NRS-5)</li> </ul>	Hepar sulphuris 200, 1dose followed by Placebo	
08/2/2019	<ul style="list-style-type: none"> <li>• The papules started drying up. (NRS- 3)</li> <li>• Pain and sensitiveness both reduced. (NRS-5)</li> <li>• Itching and Sense of dryness also reduced significantly (NRS-1)</li> </ul>	Placebo	
15/2/2019	There were no sign of papules, all dried up. Skin became normal.	Placebo	

### Case no. - 2

Mrs. P. S., Female, 48 years, Housewife, presented on 11/03/2019 with vesicular eruptions at the left side of back along with extensive burning pain and itching since 2 days. Patient also complained of fever, myalgia and burning sensation in throat for last 2 days. She was unable to lie, turn or move owing to pain in left intercostal regions. On examination, 20-25 numbers of vesicular eruptions containing fluid were found along the left intercostal regions of back and were extensively sensitive to touch, with burning and itching.





In the past history, she suffered from chicken pox at the age of 16 years. Father had suffered from COPD and expired.

Patient was not feeling thirsty, tongue flabby, appetite moderate, ambi-thermal with normal bowel movement.

Diagnosis: Herpes zoster.

Remedy Name	Lach	Ran-b	Ars	Sulph	Phos	Nux-v	Arum-t	Rhus-t	Acon	Canth	Chin	Croto-t
Total	8	8	8	6	6	5	5	5	4	4	4	4
Sensations Covered	5	5	4	4	3	3	2	2	3	2	2	2
Kingdom												
[Phatak ] [Phatak A-2]Eruptions (tendency to):Zoster: (10)	1	2	1					2				1
[Phatak ] [Phatak A-2]Eruptions (tendency to):Vesicles blisters: (22)	2	3	3	2	2		3	3		3		3
[Phatak ] [Phatak A-2]Pleurodynia: (15)	1	1		1		1			1		1	
[Phatak ] [Phatak A-2]Throat (including Inner Mouth):Burning, heat in: (22)	1	1	3	2	2	1	2		1	1		
[Phatak ] [Phatak A-2]Sensitive (susceptible to noise light,pain,odour,tou...	3	1	1	1	2	3			2		3	

After Repertorization through Phatak repertory <sup>10</sup>, consulting Materia Medica and considering the whole case Ranunculus bulbosus was chosen.

Date of visit	Symptoms with intensity in Numeric Rating Scale – NRS ( 0 to10)	Treatment	Photograph
11/03/19	<ul style="list-style-type: none"> <li>20-25 numbers of vesicular eruptions at the left side of back. (NRS 7)</li> <li>Severe burning, itching and sensitivity at the site of eruption. (NRS 8)</li> <li>Myalgia, unable to lie or turn on sides. (NRS 8)</li> <li>Severe burning pain in throat. (NRS 8)</li> <li>Raised body temperature. (100° F)</li> </ul>	Ranunculus bulbosus 200, 1 Dose followed by placebo	
18/03/19	<ul style="list-style-type: none"> <li>Vesicular eruptions reduced in numbers and size. (NRS 4)</li> <li>Itching, burning and sensitivity reduced at the site of eruption. (NRS 4)</li> <li>Myalgia reduced, movement improved. (NRS 4)</li> <li>No pain in throat. (NRS 0)</li> <li>No fever (Body temp - 98° F)</li> </ul>	Placebo	
22/3/19	<ul style="list-style-type: none"> <li>Eruptions dried up maximally.(NRS 2)</li> <li>Itching, burning and pain disappeared. (NRS 0)</li> <li>General improvement of health.</li> </ul>	Placebo	
29/03/19	She presented with only altered skin colour, no other complaints.	Placebo	

**Case no. - 3**

Miss. T. H., 8 years, presented on 21/12/2018 with multiple granular, protruded warts just below the nose since 6 months. Numbers of warts were gradually increasing; even some appeared on fingers but were flat. No itching or scaling was present.

**Local examination:** 20-21 numbers of small granular warts beneath the nose, few coalescing together. 4 small granular warts on margin of upper lip. No local tenderness or bleeding found on touching the warts.

Patient had taken other homoeopathic medicines earlier, but without effect.


After the development of this type of wart just below the nose she felt very embarrassed and become melancholic, was avoiding socialization. She was chilly, had craving for fatty food and salt. Tongue fissured and cracked. Along with these she was losing weight gradually. In the past child suffered from measles at the age of 3 years. Family history showed her grandmother died from Carcinoma breast.

**Diagnosis –Filiform warts and Flat warts**

Remedy Name	Nit-ac	Ars	Iyc	Phos	Calc	Rhus-t	Nat-m	Sulph	Caust	Calc-p	Graph	Sil
Total	15	10	10	9	9	9	9	8	8	7	7	7
Sensations Covered	6	5	5	5	4	4	3	6	5	4	3	3
Kingdom												
[Phatak ] [Phatak A-2]Sadness, low spirits, mental depression: (46)	3	2	2		1	2	3	1	1		3	
[Phatak ] [Phatak A-2]Cold/Agg. (Easily chilled, lack of vital heat): (53)	2	3	2	1	3	3		1	3	2	2	3
[Phatak ] [Phatak A-2]Cravings:Fats, fatty things: (5)	2							1		1		
[Phatak ] [Phatak A-2]Cravings:Salty things: (11)				2			3		1	1		
[Phatak ] [Phatak A-2]Tongue:Cracks, fissures: (15)	2	1	1	2		3		1				
[Phatak ] [Phatak A-2]Fungus growth, excrescences, warts, condylomata...	3	1	2	2	2	1		1	2			2
[Phatak ] [Phatak A-2]Emaciation atrophy: (36)	3	3	3	2	3		3	3	1	3	2	2

After repertorization through Phatak repertory <sup>10</sup>, consulting Materia Medica and considering the whole case Nitric acid was chosen.

Date of visit	Symptoms with intensity in Numeric Rating Scale – NRS ( 0 to10)	Treatment	Photograph
21/12/18	<ul style="list-style-type: none"> <li>20-21 numbers of small granular warts beneath the nose few coalescing together.</li> <li>4 small granular warts on margin of upper lip.</li> <li>Felt very embarrassed melancholic (NRS-7)</li> </ul>	Nitric Acid 200 / 1dose	
17/01/19	<ul style="list-style-type: none"> <li>18 numbers of small granular warts. Clearing of 2, 3 warts at the sides.</li> <li>4 small granular warts on margin of upper lip- same.</li> <li>Appearance of flat wart at the base of fore finger dorsum of lefthand.</li> <li>Embarrassed and melancholic (NRS-7)</li> </ul>	Placebo	
21/02/19	Patient presented with slight improvement.	Placebo	
18/04/19	<ul style="list-style-type: none"> <li>Small granular warts 10 in number. Scattered clearing of 8,9 warts</li> <li>Complete disappearance of warts on hand</li> <li>General improvements but was in standstill condition, since last 1 month.</li> <li>Embarrassed and melancholic reduced (NRS-3)</li> </ul>	Nitric acid 200/ 1 dose	

03/05/19	No recurrence of symptoms noticed, she was very happy and socializing.	Placebo	
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**Case no. - 4**

Mr. P.S., Male, 65 years, Hindu, businessman presented on 16.09.16 with wart at lateral side of his right forearm, near the elbow joint, which was jagged, blackish colour in nature. The wart appeared 10 years ago as size of a pea, but was gradually increasing in size. Earlier the patient tried various allopathic medications but got no such improvement and stopped any kind of treatment. Owing to the increasing size and irregular, jagged edges he was facing difficulty in wearing clothes.

In his past history, there was Haemorrhoids, anal fistula, GB stone; all of them operated. There was also history of jaundice and recurrent malarial attacks.





Family history showed his mother had pleural effusion and his father had diabetes and arthritis. Patient was chilly. He had cravings for oily, spicy foods, mutton; was a chronic smoker. He had history of bleeding per rectum with sticking pain, even after his operation for Haemorrhoids and fistula, with occasional bleeding per rectum. His stool, urine, sweat was also very offensive. Mentally he was very irritable and becomes angry easily as revealed by his wife. She also said that he always remains under business stress; becomes very much irritable, even curses others aggressively and even desires revenge. His irritability increased after death of his best friend from cancer of lung, 3 years back.

**Diagnosis- Digitate wart.**

Symptoms:	9	Remedies:	81	Show Repertorisation Tools													Prescribe	Remedy List	Record	Replace	View All	More Results
				Sep	Nit-ac	Nux-v	Sulph	lyc	Anac	Bapt	Carb-v	Puls	Thuj	Ign	Staph							
Remedy Name																						
Totals	8	7	7	7	7	5	5	5	4	4	4	4	4	4	4							
Symptoms Covered	4	5	5	5	5	2	3	3	3	3	3	3	3	2	2							
Kingdom																						
[Phatak] [Phatak A-Z]Anger, vexation, irritability,fretfulness,bad temper...	2	2	3	2	3	1							2	2	2							
[Phatak] [Phatak A-Z]Contradictions intolerant of Agg.: (9)	2		1		2									2								
[Phatak] [Phatak A-Z]Cursing: (6)		1			1																	
[Phatak] [Phatak A-Z]Cruelty: (5)					2																	
[Phatak] [Phatak A-Z]Cravings:Fats, fatty things: (5)		2	1	1																		
[Phatak] [Phatak A-Z]Cravings:Meat: (4)																						
[Phatak] [Phatak A-Z]Stools:Bad odour, foul, putrid: (19)				1	1					1	2	1										
[Phatak] [Phatak A-Z]Urine:Foul, offensive: (14)	3	1		1						1	1	2	1									
[Phatak] [Phatak A-Z]Sweat:Offensive, foetid, putrid: (24)	1	1	1	2						2	1	1	1								2	

After repertorization through Phatak repertory <sup>10</sup>, consulting Materia Medica and considering <sup>10</sup> the whole case Nitric acid was chosen.



Date of visit	Symptoms with intensity in Numeric Rating Scale – NRS (0 to10)	Treatment	Photograph
16.9.16	<ul style="list-style-type: none"> <li>Wart at lateral side of right forearm, near elbow joint jagged blackish and was gradually increasing in size. (NRS-9)</li> <li>Anger, cursing in slight contradiction (NRS-7)</li> <li>Offensive discharge of body secretions. (NRS-7)</li> </ul>	Nitric acid 200, one dose followed by Placebo	
21.10.16	<ul style="list-style-type: none"> <li>Wart at lateral side of right forearm near elbow joint, persisting- jagged blackish with slight reduction of size of projections. (NRS-7)</li> <li>Anger, cursing in slight contradiction slight reduced (NRS-5)</li> <li>Offensive discharge of body secretions reduced. (NRS-4)</li> </ul>	Placebo	
16.12.16	<ul style="list-style-type: none"> <li>Wart at lateral side of right forearm near elbow joint, persisting- blackish colour and projections reduced with reduction of size. (NRS-4)</li> <li>Anger, cursing same as that of last visit (NRS-5)</li> <li>Offensive discharge same as that of last visit (NRS-4)</li> <li>But recurrence of bleeding per rectum with pain (NRS- 6)</li> </ul>	Nitric acid 200, one dose	
January 2017 – August 2017	He visited the OPD once in two months, wart was gradually decreasing.	Placebo	
15.09.17	<ul style="list-style-type: none"> <li>The wart was almost levelled with the skin and the jagged appearance gone completely.</li> <li>Anger, cursing reduced (NRS-4)</li> <li>Offensive discharge reduced (NRS-3)</li> <li>No bleeding per rectum with pain (NRS- 0)</li> </ul>	Placebo	




**Case no.- 5**

Mr. M.D., 60 years old male patient visited the OPD on 25/01/2019 with multiple flat warts on the sides of right hand since 2 years. They were multiple in numbers of varying sizes (approx 8 big and 6 small) which were gradually increasing in size. Surface of warts were rough and with thickened skin over it. Itching and burning was present particularly at night. He applied allopathic and homoeopathic ointments but without any positive effect. In past he suffered from malaria 2 times at age of 28 and 45 years. He was a chain smoker, diabetic, non hypertensive, chilly person having desire for milk. He was always restless, anxious, did work very hurriedly and was having fear of being poisoned.

**Diagnosis - Flat warts**

Symptoms: 6 Remedies: 87		Show Repertorisation Tools												
		Prescribe												
		Remedy List												
		Record												
		Replace												
		View All												
		More Results												
Remedy Name		Apis	Rhus-t	Calc	Nux-v	Ars	lyc	Sil	Bell	Kali-c	Rumx	Sabad	Aur	
Total	6	6	6	6	6	5	5	5	4	4	4	4	3	
Sensations Covered	3	3	2	2	3	2	2	2	2	2	2	2	2	
Kingdom														
[Phatak ] [Phatak A-Z]Fear:Poison: (9)		1	1						1					
[Phatak ] [Phatak A-Z]Cold:Agg. (Easily chilled, lack of vital heat): (53)			3	3	3	3	2	3		3	2	3	2	
[Phatak ] [Phatak A-Z]Cravings:Milk: (12)		2	2			1						1		
[Phatak ] [Phatak A-Z]Direction of symptoms:Side:Right: (30)		3		3	3	1	3	2	3		2		1	
[Phatak ] [Phatak A-Z]Warts:itching: (2)										1				
[Phatak ] [Phatak A-Z]Fungus growth, excrescences, warts, condylomata...														

After Repertorization through Phatak repertory <sup>10</sup>, consulting Materia Medica and considering the whole case Rhus toxicodendron was chosen.

Date of visit	Symptoms with intensity in Numeric Rating Scale – NRS (0 to10)	Treatment	Photograph
25/01/19	<ul style="list-style-type: none"> <li>Flat warts on the sides of right hand(approx 8 big and 6 small), Surface of warts rough with thickened skin over it. (NRS-7)</li> <li>Itching and burning over warts, particularly at night. (NRS-5)</li> <li>Anxiety and restlessness (NRS-6)</li> </ul>	Rhus toxicodendron 10 M / 1 dose	
21/02/19	<ul style="list-style-type: none"> <li>Warts on sides hand flattened (approx 8 big and 6 small), smoothening of skin over the wart. No new warts (NRS-3)</li> <li>No Itching and burning. (NRS-0)</li> <li>Anxiety and restlessness reduced (NRS-2)</li> </ul>	Placebo for 1 month.	
15/03/19	All warts disappeared with return of normal skin colour.	Placebo	

## Discussion and Conclusion

Cases of five common viral skin disease conditions treated with Homoeopathic medicines were included in the case study. The indicated medicines were prescribed in different potencies as per the susceptibility of each individual patient and guidelines of Organon of Medicine. Placebo was prescribed as long as improvement continued. The medicines were not only efficient in removal or dissolution of the skin lesion of the viral disease, but also provided relief to the associated symptoms of the patient. All the patients were followed up for more than 3 months without any medication. No patient complained of any adverse report during the course of treatment or follow up period. Consent was obtained from the patient or their parents (in case of minor) before taking their photographs. The medicines namely Nitric acid, Rhus toxicodendron, Ranunculus bulbosus and Hepar sulphuris have been reported in the literature as useful for treatment of skin lesions as per their indications. These cases again substantiated the effectiveness of individualised Homoeopathic treatment in treatment of common viral skin diseases. Randomized controlled trials with larger sample size are warranted for validation of the result.

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3. Issue with supplement: Payne DK, Sullivan MD, Massie MJ. Women's psychological reactions to breast cancer. Semin Oncol 1996; 23(1, Suppl 2):89-97.
4. Books and Other Monographs
  - a) Personal author(s): Ringsven MK, Bond D. Gerontology and leadership skills for nurses. 2nd ed. Albany (NY): Delmar Publishers; 1996.
  - b) Editor(s), compiler(s) as author: Norman IJ, Redfern SJ, editors. Mental health care for elderly people. New York: Churchill Livingstone; 1996.
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1. Journal article on the Internet

Aboud S. Quality improvement initiative in nursing homes: the ANA acts in an advisory role. Am J Nurs [serial on the Internet]. 2002 Jun [cited 2002 Aug 12];102(6): [about 3 p.]. Available from:<http://www.nursingworld.org/AJN/2002/june/Wawatch.htm>

2. Monograph on the Internet

Foley KM, Gelband H, editors. Improving palliative care for cancer [monograph on the Internet]. Washington: National Academy Press; 2001 [cited 2002 Jul 9]. Available from: <http://www.nap.edu/books/0309074029/html/>.

3. Homepage/Web site

Cancer-Pain.org [homepage on the Internet]. New York: Association of Cancer Online Resources, Inc.; c2000-01 [updated 2002 May 16; cited 2002 Jul 9]. Available from: <http://www.cancerpain.org/>

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