



## EFFICASY OF AJMODADI VATAK IN SANDHIGATAVATA

### – A REVIEW

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#### ABSTRACT :

In ayurveda many *vatarogas* are explained in details among them *sandhigatavata* is very common having sign & symptoms like lack of movements of the joints, pain & stiffness in joints. In different texts many formulations are given useful in different *vatarogas* viz *guggul kalpas* & *rasaushadhis*. But data available and the mode of action of specific formulation is negligible. Taking this in consideration this is an effort to find out efficacy of *Ajmodadi vatak* in *sandhigatavata*. *Ajmodadi vatak* is a polyherbal formulation mentioned to be useful in all types of *vataroga*. Present review explains pharmacological potential of *Ajmodadi vatak* in *sandhigatavata* along with the other pharmacological activities of each ingredient in the formulation.

**Keywords :** *Ajmodadi vatak*, anti- inflammatory, analgesic, *sandhigatavata*, review.

**INTRODUCTION:** *Sandhigatavata* is the most common disease of old age mentioned under *vataroga* in ayurveda. Symptomatically *sandhigatavata* is much close to osteoarthritis. According world health organization osteoarthritis is the second commonest musculoskeletal problem in the world population. Disease starts between the age of 40 – 45 yrs., occurs due to degeneration of cartilage & synovial membrane in joints, which affects mostly weight bearing joints i.e. knees, hips. Common sign & symptoms are inflammation and stiffness in joints, pain during movements of joints, crepitations during movements of joints. Modern science explains it as degenerative joint disease. In the allopathic system of medicine the management mainly based on symptomatically relief in painful conditions but still there is need for such therapeutic regimen that could retard the disease progression. For the search of such agents, herbal remedies and dietary

supplements have become an important area of research. The review is framed to discuss the recent advancement in use of ayurvedic drug for management of *sandhigatavata*. Several ayurvedic drugs are used in *sandhigatavata* mentioned in various ayurvedic texts. *Ajmodadi vatak* is mentioned in Chakradatta (*Amvatarogadhikara*) useful in many *vatarogas* viz. *amvata*, *gridhrasi*, *vishwachi*, *tunipratituni*, *katipeeda*, *gudapeeda*, *asthipeda*, *sandhishotha*<sup>1</sup>. *Ajmodadi vatak* is having ingredients like *ajmoda*, *marich*, *sunthi*, *pippali*, *vidang*, *chitrak*, *haritki*, *pippalimul*, *shatavha*, *vidharamul*. Most of the ingredients are *vata shamak* and *katu*, *ushna*, *laghu* which digests *ama*, so it is useful in *amvata* but this study is to find out efficacy of *ajmodadi vatak* in *sandhigatavata*.

#### Material & Method of Preparation of *Ajmodadi Vatak*:

*Ajmodadi vatak* is mentioned in Chakradatta *Amvatarogadhikara* shloka no. 37-43.

Name of Ingerdients	Quantity	Name of Ingerdients	Quantity
<i>Ajmoda</i>	46gm	<i>Shatavha</i>	46gm
<i>Marich</i>	46gm	<i>Saindhaw</i>	46gm
<i>Pippali</i>	46gm	<i>Pippalimul</i>	46gm
<i>Vidanga</i>	46gm	<i>Sunthi</i>	460gm
<i>Devdaru</i>	46gm	<i>Vidharamul</i>	460gm
<i>Chitrakmul</i>	46gm	<i>Haritki</i>	230gm

All above drugs are made into fine powder form and kept ready for mixing in *paka*. 1570 gm *gud* is made into pieces and mixed with appropriate quantity of water in a vessel and heated over *mridu agni* till

it reaches proper *paka*. All powders are mixed in *gud paka* uniformly. Then this substance is made into *vataks* having weight of 10gms.

**Table – 1 Ingredients of Ajmodadi Vatak**

Sr. No.	Ingredient's Name	Scientific Name (Family)	Part used	Ayurvedic properties	Pharmacological activities of part used
1	<i>Ajmoda</i>	Carum roxburghianum	Fruit, oil, root	<i>Rasa- katu, tikta, Guna- Laghu, ruksha, tikshna, Vipaka- katu, Veerya- Ushna. Doshaghnata – Kaphavatashamak. Rogaghnata – Kaphavatajvikara, vedanayuktavikara, agnimandya, adhman, udarshoola, bastishoola. Karma – Vedanasthapana, deepana, vatanulomana, shoolaprashamana, mutraprawartak<sup>2</sup></i>	Antispasmodic anthelmintic antiflatulant carminative Stimulant Stomachic <sup>3</sup>
2	<i>Marich</i>	Piper nigrum (Piperaceae)	Fruit	<i>Rasa-Katu, Guna – Laghu, teekshna, ruksha Veerya – Ushna Vipak – Katu Doshaghnata – Kaphavatashamak Rogaghnata – Pratishyaya, kasa, shwasa, shoola, agnimandya, vatavikar, ajeerna, adhmana, shothvedanayuktavikar Karma – Lekhana, nadibalya, nadiuttejaka, deepana, pachana, vatanulomak, strotoshodhana<sup>4</sup></i>	Antiinflammatory & analgesic <sup>5</sup> , antioxidant <sup>6</sup> , lipolytic, muscle relaxant CNS depressant, anticonvulsant <sup>7</sup> .
3	<i>Pippali</i>	Piper longum (Piperaceae)	Fruit, root	<i>Rasa – Katu Guna – Laghu, snigdha, tikshna, Veerya – Anushna, sheeta</i>	Anti inflammatory, antinociception <sup>9</sup> , antibacterial <sup>10</sup> ,

				<p><i>Vipak – Madhur</i>  <i>Doshagnata –</i>  <i>Kaphavata shamak</i>  <i>Rogagnata – Shotha,</i>  <i>aruchi, agnimandya,</i>  <i>vibandha, amavata,</i>  <i>vatarakta, shatayukta</i>  <i>vedana,</i>  <i>mastishkadaurbalya,</i>  <i>vatanyadhi, udarshoola.</i>  <i>Karma –</i>  <i>Shirovirechana,</i>  <i>vatahar, medhya,</i>  <i>shoolaprashamana,</i>  <i>vatanulomana,</i>  <i>mridurechana, balya,</i>  <i>rasayana<sup>8</sup>.</i></p>	.
4	<i>Pippalimula</i>	Piper longum (Piperaceae)	Root	----- do ----- -----	-----do -----
5	<i>Vidanga</i>	Embelia ribes (myrsinaceae)	Fruit Root, Leaf	<p><i>Rasa – Tikta, katu</i>  <i>Guna – Laghu, raksha,</i>  <i>teekshna</i>  <i>Veerya – Ushna</i>  <i>Vipaka – Katu</i>  <i>Prabhava – Krimighna</i>  <i>Doshagnata –</i>  <i>Kaphavatashamak</i>  <i>Rogagnata –</i>  <i>Shiroroga, akshepaka,</i>  <i>apasmara,</i>  <i>pakshaghata,</i>  <i>agnimandya ,</i>  <i>udarshoola, adhmana,</i>  <i>vibandha.</i>  <i>Karma –</i>  <i>Shirovirechana,</i>  <i>nadibalya, deepana,</i>  <i>pachana, ,</i>  <i>raktashodhaka,</i>  <i>rasayana<sup>11</sup>.</i></p>	Analgesic <sup>12</sup> , Anti-inflammatory, Hypotensive, Antipyretic & Immunostimulant <sup>13</sup>
6	<i>Devdaru</i>	Cedrus deodara (Pinaceae)	Heart wood, oil, leaf, bark, resin	<p><i>Rasa – Tikta</i>  <i>Guna – Laghu, snigdha</i>  <i>Veerya – Ushna</i>  <i>Vipaka – Katu</i>  <i>Doshagnata –</i>  <i>Kaphavata shamaka</i>  <i>Rogagnata –</i>  <i>Sandhivata, vedana,</i>  <i>kandu, jeerna</i>  <i>sandhivata,</i>  <i>jeernaamavata,</i>  <i>vatarakta, gridhrasi,</i>  <i>amadosha, adhmana,</i>  <i>vibandha, vatavikara.</i>  <i>Karma – Shothahahara</i>  <i>,vedanasthavana,</i>  <i>vranashodhana,</i>  <i>vranaropana, deepana,</i>  <i>pachana, anulomana,</i>  <i>raktaprasadana,</i></p>	Antiinflammatory & analgesic <sup>15</sup> 'Immunomocclulatory' <sup>16</sup>

7	Chitrak	Plumbago zeylanica (Plumbaginaceae)	Root, Root, bark	<p>lekhana<sup>14</sup>.</p> <p>Rasa – Katu Guna – Laghu, ruksha, teekshna Veerya – ushna Vipaka – Katu Doshagnata – Vatakaphashamaka, pittavardhaka Rogagnata – Shotha, amavata, nadidaurbalya, vatavyadhi, agnimandya, udarshoola, grahani. Karma – Lekhana, uttejaka, grahi, shothahara, swedajanana, rasayana<sup>17</sup>.</p>	Anticancer, antibacterial, antifungal hypolipidaemic, antiatherosclerotic, antipyretic, hepatoprotective & CNS depressant <sup>18</sup>
8	Shatavha	Anethum sowa (Apiaceae)	Fruit, leaf, flower, seed oil	<p>Rasa – Katu, tikta Guna – Laghu, ruksha, tikshna Vipaka – Katu Veerya – Ushna Doshagnata – Kaphavatashamak. Rogagnata – Externaly oil – useful in pakshaghant, sandhivata, udarshoola, karnashoola as lepa in shiroshoola, parshwashoola, vatarakta. Internal – Vatavyadhi, agnimandya, ajeerna, adhamana. Karma – External – Vedanasthapana, shothahara, vranaropana. Internal – Kaphashamaka, hridya, uttejaka &amp; shothahara<sup>19</sup>.</p>	Antibacterial, anti-inflammatory, antihyperlipidaemic, antioxidant, diuretic <sup>20</sup>
9	Saindhaw	Rock salt		<p>Rasa – Lavana slightly madhur Guna – Laghu, snigdha Vipaka – madhura Veerya – Sheeta Doshagnata – Tridoshashamak Rogagnata – Hikka, vrana, netraroga, vibandha. Karma – Rochana, deepana, vrishtya, chakshushya, hridya, hikkanashan,</p>	Carminative, Laxative, Stomachics & Tonic <sup>22</sup>

				<i>kaphachhedana, avidahi, vranadoshara</i> <sup>21</sup> .	
10	<i>Sunthi</i>	Zingiber officinale (Zingiberaceae)	Fresh rhizome, (Ardrak) Dried rhizome (Sunthi)	<i>Rasa – Katu Guna – Laghu, snigdha (shunthi) Veerya – Ushna Vipaka – Madhura Doshagnata – Vatakaphashamak Rogagnata – Amvata, sandhishotha, vatavyadhi, katishool, agnimandya, ajeerna, koshtavata, hriddaurbalya, . Karma – Sheetaprashamana, shothahara, vedanasthapana, nadiuttejaka, deepan, pachan, vatashamaka, vatanulomaka, kaphahara</i> <sup>23</sup> .	Antiinflammatory & antiarthritic <sup>24</sup> , analgesic <sup>25</sup> Antirheumatic, shoolaprashaman, immunostimulant, useful in muscle weakness & antioxidant <sup>26</sup>
11	<i>Vridhdharu</i>	Argyria spesiosa (convolvulaceae)	Root, leaf	<i>Rasa – Katu, tikta, kashay Guna – Laghu, snigdha Veerya – Ushna Vipaka – Madhura Doshagnata – Kaphavatashamaka Rogagnata – Kaphavatajavikara, vranashotha, vatavyadhi, agnimandya, amadosha, vibandha, shosha. Karma – Vranapachana, vranashodhana, medhya nadeebalya, deepana, amapachana, anulomana, shothahara, kaphaghna, rasayana, balya</i> <sup>27</sup>	Antifungal & antibacterial <sup>28</sup> , antidiabetic, diuretic & hypotensive <sup>29</sup>
12	<i>Haritki</i>	Terminalia chebula (Combretaceae)	Fruit	<i>Rasa – Kashya, tikta, madhur, katu, amla Guna – Laghu, ruksha Veerya – Ushna Vipaka – Madhura Prabhav – Tridoshashamak esp. vatashamak Rogagnata – Vatavyadhi, nadidaurbalya, shotha, vedanayukta vikara, vatarakta, vrana, shotha, agnimandhya,</i>	Hypotensive, purgative, antimicrobial, anti-stress & hypolipidaemic <sup>31</sup>

				<i>shoola, vibandha. Karma – Vedanasthapana, nadibalya, kaphaghna, deepana, pachana, rasayana</i> <sup>30</sup>	
13	<i>Gud</i>	Saccharum officinarum (Poaceae)	Stem, root	<i>Rasa – Madhura Guna – Sara, snigdha, guru Veerya – sheeta Vipaka – madhura Doshagnata – vatapittashamaka Ragagnata – vibandha, daurbalya, karshya. Karma – Kapha vardhaka, saraka, balya, brinhana, vrishya</i> <sup>32</sup>	Hepatoprotective <sup>33</sup> , Antioxidant <sup>34</sup>

**DISCUSSION:** *Ajmodadi vatak* is having 6 ingredients cedrus deodara ,piper longum , zingiber officinale ,piper nigrum , embelia ribes & anethum sowa which possess anti-inflammatory activity and 4 ingredients piper nigrum ,embelia ribes , cedrus deodara & zingiber officinale are having analgesic properties. Some ingredients possess additional biological activities viz. antioxidant, anticancer, antibacterial, immunomodulatory, antipyretic, diuretic etc. The combination of piper longum, piper nigrum and zingiber officinale known in ayurveda as *trikatu* is a significant bioenhancer. Also maximum ingredients are having ayurvedic properties viz *katu, ushna, laghu, snigdha, vatakaphashamaka, vedanasthapaka, shothohara , vatanulomak & rasayana* .

**CONCLUSION:** Above discussion shows maximum ingredients in *ajmodadi vatak* possess *laghu, ushna & snigdha* properties can reduce stiffness or rigidity of joints. Antinflammatory (*shothohar*) and analgesic (*vedanasthapak*) properties can remove inflammation & pain in joints . *Vatashamak* property of it's ingredients can reduce discomfort & crepitations of joints . In totality it is *rasayana* which can

provide nutritional value to the joints and promote their effective functioning. This concludes *ajmodadi vatak* can give beneficial effects in *sandhigatavata*.

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