A Study on Validation of Sloka ‘Tarunasthi Namayante….’ in light of Sanskrit Grammar

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ABSTRACT

Ayurveda is a sacred science of life. In all the living beings the matter and energy is existing in the form of Dosha, Dhatu & Mala. As we know that the reading is the source of obtaining the information only. The knowledge of the subject demands precise manner of study which called Analysis. Since, ancient time grammar has been tool for understanding and writing various texts whether literal work or any scientific. As Sastras were written in Sutra Roopa, Vyakarana (grammar) has always turned to be helping hand in extracting true meaning.

‘Tarunasthi Namayante….”, which states the relation of type of Asthi (bone) and type of Bhagna (fracture) generally occurring in them; citied from Nidana Sthana, giving sufficient proof of clinical orientation of Acharya. Classical grammatical analysis includes study of Dhatupada, their meaning, correlation with meanings in contemporary literature and their validation. After validation of we can say that principles both clinically and literally about classification of Asthi can be verified. As each principle is accountable so, it is upon us to elaborate and understand it under present circumstances. We can say that knowledge of classical grammar is of extreme importance to bring out real meaning out of Sutras of classical
text, thus making our principles more acceptable to new era and to take their maximum utilization in serving the nation.

KEYWORDS- Asthi Prakara, Vyakarana, Tarunasthi Namayante., Dhatupada, Validation

Introduction

Ayurveda is not merely a medical system; it is a sacred science of life. It helps the human being to lead a happy life with pure body and mind. In all the living beings the matter and energy is existing in the form of Dosha, Dhatu & Mala.\(^1\)

As we know that the reading is the source of obtaining the information only. The knowledge of the subject is very far from that information. It demands precise manner of study which called Analysis. Beside this, inspection is must to recognize the deep facts regarding to any subject. Since, ancient time grammar has been tool for understanding and writing various texts whether literal work or any scientific. As Sastras were written in Sutra Roopa, Vyakarana (grammar) has always turned to be helping hand in extracting true meaning. Panini Sutras are valuable hand in understanding Gudha Artha (deep knowledge) encrypted in Sutras.

Every Sloka is useful in present scenario so, is ‘Tarunasthi Namayante….”, which states the relation of type of Asthi (bone) and type of Bhagna (fracture) generally occurring in them\(^2\); citied from Nidana Sthana. As we can see that five types of Asthi Prakaras and their examples are given in Sharir Sthana of Susruta Samhita but above Sloka is part of Bhagna Nidana, giving sufficient proof of clinical orientation of Acharya; as he have described types before only for the better understanding of topic i.e. relation between Asthi and Bhagna.

Method

First of all a literary review of Asthi Sharir comprising of Asthi Paribhasa, Sankya, Prakara and Bhagna is done to bring out the basic information given in classical texts. Root meaning (Dhatupada) of Bhagna type is taken from Panini Sanskrit Vyakarana Kosa. Then meaning of root word is sorted out from Monier Williams Sanskrit English Dictionary. After which with the help of Orthopedic Text book and Medical Dictionary meanings are compared and a conclusion is drawn.

Literary Review

Asthi is a hard substance which remains even after most part of body has been decayed. According to Susruta, it is substance which remains even after else very part like flesh, muscles etc. are shattered after death\(^3\) It remains as last identity of person even after demise. The Asthi Karmas are Deha Dharana, Majja Pushti and support to Mamsa, Sira and Snayu.\(^4\)\(^5\)
The numbers of Asthi in the Sharira according to different Samhitas are point of confliction as Charaka Samhita, Astanga Hrudaya, Astanga Sangraha and Kashyapa Samhita counts 360 but Sushruta Samhita and Bhavaprakasha enumerated 300. As we know that knowledge of Asthi can be traced back from Vedas, passing chronologically down to Samhitas. Considering its history of description and importance many methods and thought can be visualized about enumeration in classical texts giving difference in its Sankhya.

**Asthi Bhedas (Types)**

Depending upon size, shape, position of Asthi in the body total Asthi is divided into five types. These are tabulated below-

**Table No.1: The Types of Asthi**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Types</th>
<th>S.S</th>
<th>A.S</th>
<th>A.H.</th>
<th>B.P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kapala</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Ruchaka</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>3</td>
<td>Taruna</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>4</td>
<td>Valaya</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5</td>
<td>Nalaka</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

The **meaning and examples** of particular type of Asthi

**Kapalasthi** - These are flat in nature. Literally it means bone which covers and protects the brain. These are present in the Janu, Nitamba, Amsa, Ganda, Talu, Shankha, Vankshana and Madhyashira are known as Kapala Asthi.

**Valayasthi** - These are round in shape or particularly hemi circle in shape. This type is present in Pani, Pada, Uru, Parshva and Prustha are Valayasthi. Some commentator’s don’t agree with it as they count some other bones in this category as Pada, Hasta, Griva and Prishsta.

**Tarunasthi** - These are soft in nature. Literally it means which have either not fully developed i.e. ossified. Also the bones of child have come under same scenario. These are present in the Ghrana, Karna, Greeva and Akshikuta are called as Tarunasthi.

**Nalikasthi** - These are long like tubes and hollow from within. They are reed shaped. Asthi’s which are not counted in any other types are to be in Nalikasthi. Commentators like Dalhana and Bhoja have specified some of bones like Hasta Anguli, Pada Anguli, Pada Tala, Kurcha, Bahu Asthi, Jangha Asthi etc in examples of this type. Typically bones of extremities are Nalakasthi.
Ruchakasthi – These are bones which are different from above and are used to chew food and enjoy the taste. These are for taste sensation. The Dashanas are known as Ruchakasthi. These are 28 or 32 in all. So, here Ruchaka i.e. Danta (teeth) are also regarded as Asthi along with various other stiff parts

Types of Bhagna

Now, let us consider the type of Asthi on basis of type of Bhagna in them. The bones sustain trauma in different ways. Acharya Sushruta has paid due attention to this fact and observed that all the bones do not show similar type of effect due to trauma. As we already know that Acharya have particularly described the types of fractures occurring in each type of bone [13] mentioned as below-

1. Tarunasthi – Namayante
2. Nalakasthi - Bhajayante
3. Kapalasthi - Vibhidhyante
4. Ruchkasthi – Sphutayante
5. Valayasthi – Sphutayante

Grammatical Analysis

On profound analysis on literal basis of the words denoted as fracture types, a clear picture can be drawn on relation of specific fracture in the specific type of bone. Firstly let us dissect word on basis of Dhatu Pada and its meaning as per Panini Vayakarana. Dhatu Pada is root word of any word from which it has evolved. So, the basic meaning of each word can be best understood only when we know the Dhatu Pada of it. For instance the Dhatu Pada [14] of fracture related terms which are as follows -


The literal meaning of these Dhatu Pada is as follows [15] -

1. Nama Prativatve Sabde Ca- to bend, tear, destroy by pulling down.
2. Bhanjo Amardane / Bhujo Kautlye- shatter, break into pieces, breach.

By now we are well versed with Dhatu Pada and their meaning of each type of Asthi described in Samhita. Now the picture is better visualized as bone, its fracture and what does happen in fracture is much clear. We can now easily compare the type of fracture in particular bone as per modern anatomy, with our
classical description and find the similarity or variability. This can be better understood by the help of tables demonstrated below-

(Here we will consider only four types of fracture as teeth fracture is totally other branch and out of purview of this work).

Tables No. 2 Asthi Prakara; it’s Dhatu Pada (root word) and their Meanings

<table>
<thead>
<tr>
<th>Type of bone</th>
<th>Definition[^16]</th>
<th>Type of Bhagna</th>
<th>Sandhi</th>
<th>Dhatupada</th>
<th>Meaning of Dhatupada</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taruna</td>
<td>Yaani Ghan Ta N Prapnuvanti Taani Tarunasthi</td>
<td>Namayante</td>
<td>Nme Ante</td>
<td>Nam</td>
<td>Nama Prativatve Sabde Ca</td>
</tr>
<tr>
<td>Kapala</td>
<td>Km Naam Shirah Tm Palyati Iti Kapala</td>
<td>Vibhidhyante</td>
<td>Vibhidi Ante</td>
<td>Vidh, Bhid</td>
<td>Vidha Vidhane.</td>
</tr>
</tbody>
</table>

Table No. 3 Comparison of Classical Word Meanings of Asthi Bhagna & Type of Fractures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Taruna</td>
<td>Namayante</td>
<td>To bow, to bend, curve.</td>
<td>Cartilaginous or bones of child (which are not fully ossified)</td>
<td>Green Stick Fracture</td>
<td>bone bends and breaks</td>
</tr>
<tr>
<td>Valaya</td>
<td>Sphutayante</td>
<td>Burst, split, cracked.</td>
<td>Ribs</td>
<td>break in the rib (detach)</td>
<td>Separation, cracking</td>
</tr>
</tbody>
</table>
Kapala Vibhidhyante Fissure, gap, cleaving. Flat bones like Skull bones, hip bone, scapula Linear, Depressed, Diastatic, Basilar widen the suture, displaced inward, transverse break in the full thickness of the skull

Nalaka Bhajayante Shatter, break to pieces. Various Long Bones like Femur, Humerus etc. Transverse, Oblique, Spiral, Comminuted. perpendicular to the long axis, at an angle, bone fragments scatter

It is clearly visualized that our Acharaya had given principle of Asthi Bhagna and Asthi Prakara on clinical basis as is proved here merely by meanings of root word on basis of classical grammar. This means that the bones which tend to bend or curve can be a type of Tarunaasthi, bones in which linear fractures or fissure is commonest type of fracture can be a type of Kapalasthi, bones which commonly breaks into pieces or detaches (having semi circular shape) from its attachment can be a type of Valayaasthi and bones in which fracture are mainly perpendicular to axis, transverse to axis or at angle can be a type of Nalakaasthi. This can be easily understood in below tabulated form-

Table No. 4-Showing the relation of Asthi Prakara and commonest type of fracture in them

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Commonest Type of Fracture</th>
<th>Common Meaning</th>
<th>Asthi Prakara</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Green Stick Fracture</td>
<td>bone bends and breaks</td>
<td>Taruna</td>
</tr>
<tr>
<td>2</td>
<td>break in the rib (detach)</td>
<td>Separation, cracking</td>
<td>Valaya</td>
</tr>
<tr>
<td>3</td>
<td>Linear, Depressed, Diastatic, Basilar</td>
<td>widen the suture, displaced inward, transverse break in the full thickness of the skull</td>
<td>Kapala</td>
</tr>
<tr>
<td>4</td>
<td>Transverse, Oblique, Spiral, Comminuted.</td>
<td>perpendicular to the long axis, at an angle, bone fragments scatter</td>
<td>Nalaka</td>
</tr>
</tbody>
</table>

Conclusion

Susruta aptly called as "The father of Surgery" can easily be also named as "The father of applied anatomy", as he not only describes the structural anatomy but also have given their applied usefulness. After
validation of we can say that Classification of Asthi is specifically given in accordance to type of Bhagna (fracture) occurring in them; depicting the clinical orientation of our sages. The accuracy of principles both clinically and literally, can be verified. Each principle is accountable and it is to us to elaborate and understand it under present circumstances. We can say that knowledge of classical grammar is of extreme importance to bring out real meaning out of Sutras of classical text, thus making our principles more acceptable to new era and to take their maximum utilization in serving the nation.

References

7. Vaidya Yadunandana Upadhyaya, editor. Hindi commentary Vidyotini by Kaviraja Atrideva Gupta, on Ashtanga Hrudaya of Vagbhata, Sharir Sthana; Ch.3 Athatoangvibhaga Shariram, verse 15. Varanasi; Choukhamba Prakashan, reprinted in 2010, Pp 251
16. Raja Radha Kanta Deva editor; Shabdkalpadrum; Vol (1-5); edition 3rd; Varanasi: Chowkamba Sanskrit Series Office: 1967. P
18. J. Maheshwari; Essential Orthopaedics; edition 3 revised; 7th reprint ; Ch 1 Orthopaedic Trauma; Introduction: New Delhi Jaypee Brothers Medical Publishers; 2011, p. 1-7
19. Donald Venes, editor; Taber’s Cyclopedia Medical Dictionary; Philadelphia, edition 21st ; F. A. Davis Company; 2005