



## **Excision of Giant Congenital Ankle Lipoma wsr *Chedana karma* of *Medhaja Granti* - A Single case study.**

**Dr. Nirmaladevi N N<sup>1</sup>, Dr. Poornima jalawadi<sup>2</sup>, Dr. Siddayya Aradhyamath<sup>3</sup>**

1.Final year PG Schlor, Department of PG and Ph.D. Studies in Shalya tantra, JSS Ayurvedic Medical college and Hospital Mysuru.

2. Reader, Department of PG and Ph.D. Studies in Shalya tantra, JSS Ayurvedic Medical college and Hospital, Mysuru.

3.Professor and HOD, Department of PG and Ph.D. Studies in Shalya tantra, JSS Ayurvedic Medical college and Hospital, Mysuru.

### **ABSTRACT:**

*Ācharya Suśruta* has explained *Medaja granthi* under the concept of *Granthi* and it can be correlated to Lipoma in contemporary science. The most common soft tissue tumour in clinical practise is a Lipoma; however, Giant lipomas are extremely rare and are entities of great concern as they can often create a diagnostic dilemma and therapeutic challenge owing to their size, location and their close relationship with other benign and malignant mesenchymal neoplasms. Lipomas are the most common soft tissue tumours. These tumors are rarer in children as compared to the adults. And there have only been a very small number of instances documented globally in the surgical literature.

Here in present a case of a gaint lipoma at Right dorsum of foot in an 8 year old boy which was diagnosed on cytology as well as radiology and successfully managed by complete excision.

**Key words:** Lipoma, Excision, *Medhaja granthi*, *Chedana karma*

## INTRODUCTION:

- The Doshas *Vata, Pitta, Kapha* invades the *Mamsa* and *Asruk, Medhas* and *Siras* causes an elevated swelling which is rounded and knotted such swelling is called as *Granthi*.<sup>1</sup> Various types of *Granthi* are mentioned in our classics, according to *Acharya Sushruta* six types of *Granthi Vataja, Pittaja, Kaphaja, Raktaja, Mamsaja* and *Medaja* have been described<sup>2</sup>. *Medhaja granti* can be correlated to Lipoma in Contemporary science.
- Lipomas are the commonest form of benign soft tissue tumors consisting of mature fat cells encapsulated in a thin fibrous tissue. These neoplastic lesions can occur in any organ of the body that has adipose tissues. Lipomas could occur as solitary or multiple lipomas.<sup>3</sup>
- Lipomas are slow growing tumors that present as painless, palpable small masses and so are often overlooked by the patients until they get to appreciable sizes. They are mostly subcutaneous but could be sub-fascial or intramuscular and are usually less than 2 cm but some can reach 20 cm in their widest diameters. Large tumors could give rise to pressure symptoms on the surrounding structures like nerves or tubular organs resulting in pain. Stretching of the investing structure including the skin can also give rise to pain<sup>4</sup>.
- In our patient, the location of the tumor on the dorsum of the foot with thin stretched out skin and pressure on the adjacent digital nerves.
- The treatment of choice for lipoma is mainly surgical as this is more likely to ensure a complete removal unlike steroid injection that causes fat atrophy or liposuction which usually would leave some fat tissues and the capsules behind. However, the latter methods leave minimal scars. If steroid injections are repeated, skin hypopigmentation may result. Solitary lipoma of a small size could be left alone but if a patient has cosmetic concern based on its anatomical location, then irrespective of size, the lipoma should be removed<sup>5</sup>.

- **Correct method of suturing** <sup>6</sup>:

ततो व्रणं समुन्नाम्य स्थापयित्वा यथा स्थितम्।

सिव्येत् सूक्ष्मेण सुत्रेणा वल्केनाश्मन्तकस्य वा ॥

(सु. सू. 25/20)

The edge of the wound should be raised, both the flaps should be brought in to apposition, then Suturing should be done by a fine thread. Now instead of *Ashmanthaka* we were using Vicryl.

## CASE PRESENTATION

A single case study -An 8yr old boy presented with a soft painless mass, (which had been growing since birth) in right foot since 7yrs.

N/K/C/O Juvenile DM; BA; IHD; Epilepsy. Patient has not underwent any kind of surgery.

There is no H/O weight loss / Metastasis / Malignant tumour / Fever

### H/O PRESENT ILLNESS:

As per the statement given by the patient's attender (Mother), he was apparently normal before 7 years. Later at the age of 1 and half year his mother noticed a painless and mobile lump on the dorsal surface of the right foot. It is gradually increasing in size.and, Patient felt difficulty in wearing shoes and clothes. For this condition, he took some folklore medicines and applicants but, the lump didn't subside. Hence, for further management he came to our hospital.

### PERSONAL HISTORY:

Ahara: Mishrahara

Vihara: Madyama

Nidra: Sound sleep

Vyasana:Nothing significant

Mala: Once in a day.

Mutra: 4-5 times/day.

### ASTASTHANA PAREEKSHA:

**Nadi:** Vataja nadi

**Mala :** Once in a day, Prakruta

**Mutra:** 4-5 times a day, Prakruta

**Jihwa:** Aliptata

**Shabda:**Prakruta

**Sparsha:**Prakruta

**Drik:**Prakruta



**Akruti:** Madhyama.

**SAMANYA PAREEKSHA:**

Built: moderately built

Appearance: good

Temperature: afebrile

Pulse:96bpm

RR: 12cpm

Bp:110/70mmHg

Nourishment: Moderately nourishment.

Pallor: Absent

Icterus: Absent

Edema: Present in ankle joint (right)

Cynosis: Absent

Kilonechia: Absent

Clubbing: Absent



**SYSTEMIC EXAMINATION:**

**Central nervous system:**

Higher mental function test: Conscious, well oriented to time place and person.

Memory:Recent and remote,intact

Hallucination/delusion/speech disturbance : absent

Cranial nerve/sensory nerve/motor system:normal

Gait:Normal.

**Cardiovascular system:**

Inspection: no scar/pigmentation found.

Auscultation: S1 and S2 heard.

Percussion: no cardiac dullness.

**Respiretory system:**

Inspection: B/L Symmetrical.

O/P:Trachea is centrally placed, non tender.

Auscultation:B/L NVBS heard.

Percussion:Normal resonant sound.

**Gastrointestinal track :**

Inspection: Umbilicus centrally placed.

Not distended, No visible scar /vein/pigmentation.

O/P: soft, non tender, not distended,no organomegaly.

no dullness sound heard.

**Musculo skeleton system examination:**

All range of movement possible, with out pain/difficulty.

Flexion; extension; rotation are possible.

**LOCAL EXAMINATION:**

**ON INSPECTION:**

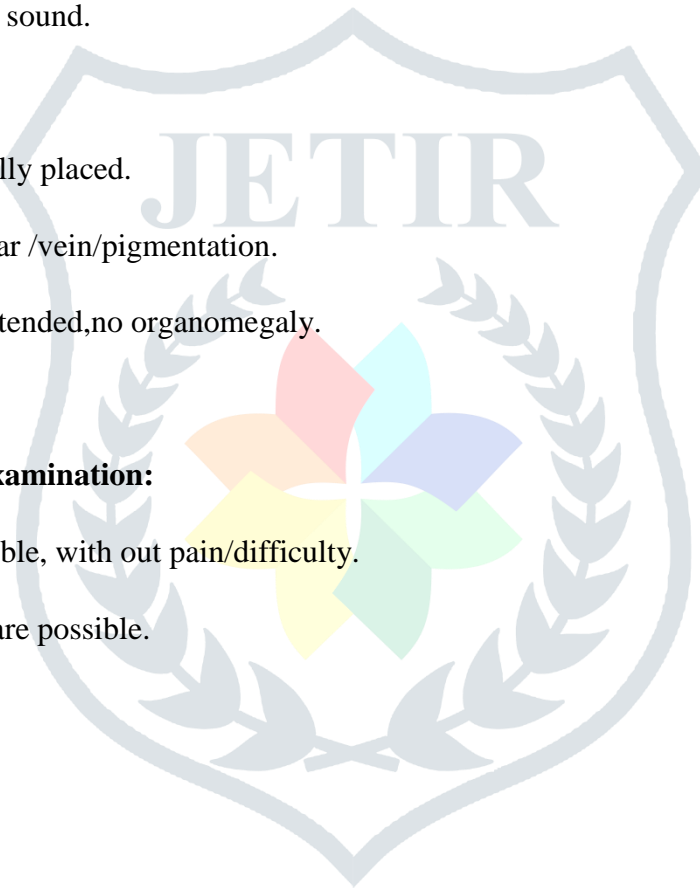
**Site:** Anterior aspect right foot, superficial to tibialis tendon.

No pain,tenderness

**Shape:**Oval shape

**Size:** Measuring- 7.9 x 7x 2.6cm

Number: 1 in number



**ON PALPATION:**

Dorsalis pedis artery and Posterior tibial artery present.

**Temperature:** Normal

Surface and Margin: Smooth surface and regular margin.

**Mobility:** Mobile

**Tenderness:** Absent

**Consistency:** soft

**Fluctuation Test:** Positive

**Fluid thrill test:** Negative

**Trans-illumination test:** Positive

**Sign of compressibility:** Negative

**Slip Test:** Positive

**Fixity to the overlying skin:** Present

**INVESTIGATION:**

- FNAC right foot swelling

Microscopic: Smear shows many clusters of mature adipocytes.

Impression - Lipoma

- X-Ray Right foot AP and Oblique view: Well defined oval shaped soft tissue swelling noted in subcutaneous plane in medial aspect of ankle and hind foot.
- USG: Well defined isoechoic lesion measuring 7.9 X7.0 X 2.6cm noted in subcutaneous plane over extensor aspect of foot crossing the joint located superficial to tibialis tendon.

No internal extension. No calcification / vascularity. Benign lesion suggestive of lipoma.

**SURGICAL PROCEDURE:**

Prior excision, informed written consent was taken,

Inj Xylocaine (test dose) was given,

Inj T.T 0.5cc (IM) was given,



Under all aseptic Measures Pt was shifted to major OT,



Spinal Anesthesia was given.



Part prepared Painted and draped.

Linear incision was taken to the dorsum of the foot

excision of Lipoma was done.



Following which the margins of the wound is approximated in proper alignment with Vicryl 3-0, wound is sutured to create a minimally visible scar line.

**OBSERVATIONAL FINDINGS:**



Image 1,Pre operative -Lipoma in the Right ankle ankle



Image 2,3-During the operation



Image 4,Exision of the Lipoma

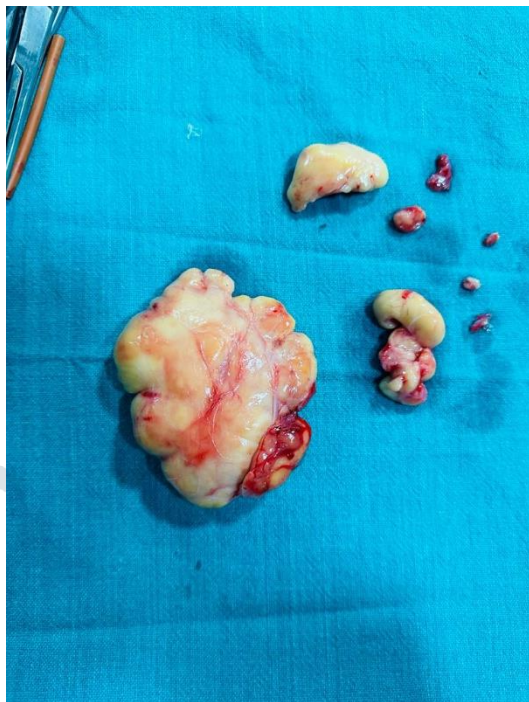


Image 5,Excised Lipoma Mass



Image 6,Wound closure



Image 7,Suturing



Image 8,Post operative 1 -week



Image 9, follow up-After 1 month



## DISCUSSION:

- *Medoja Granthi* is smooth, large or small in size, less painful, and sometimes causes itching. *Granthi* contains an excessive amount of *Medas*.<sup>6</sup>
- *Ayurveda* line of treatment includes both preventive and curative measures for *Medhaja Granthi*. Various medicines, *Lepa*, *Rakta Mokshana*, *Upnaha*, and *Agnikarma* are described, also *Shashtra Karma* like *Bhedana* (Incision), and *Chedana* (Excision) has been adopted for the management of *Granthis*.<sup>7</sup> *Acharya Charaka* mentioned that the *Granthi* should be removed along with the capsule in *Shotha Chikitsa*.<sup>8</sup>
- Solitary lipoma of a small size could be left alone but if a patient has cosmetic concern based on its anatomical location, then irrespective of size, the lipoma should be removed. The excision of the mass in our patient was made possible by the good plane avoiding injuries to the digital nerves and the dorsalis pedis artery and the patient recovered without post-operative wound infection.<sup>9</sup>

## CONCLUSION:

Lipomas are the commonest form of benign soft tissue tumors consisting of mature fat cells encapsulated in a thin fibrous tissue. The diagnosis must be based on physical examination and imaging tests. The definitive treatment is complete surgical removal and strict follow up as the recurrence is possible.

## REFERENCES:

1. Acharya, Y. T. Sushruta Samhita with Nibandhasangraha commentary (Nidana stana Granthi -Apachi-Arbuda-Galaganda Nidana ) by Dalhana and Nyaya Chandrika Panjika of Sri Gayadasa, p.(9<sup>th</sup> ed).Varanasi: Chaukhambha Orientalia; reprint edition 2009.
2. Acharya, Y. T. Sushruta Samhita with Nibandhasangraha commentary (Nidana stana Granthi -Apachi-Arbuda-Galaganda Nidana ) by Dalhana and Nyaya Chandrika Panjika of Sri Gayadasa, p.(9<sup>th</sup> ed).Varanasi: Chaukhambha Orientalia; reprint edition 2009.
3. Agu Thaddeus chika, Agu Thaddeus Chika., An unusuval presentation of Lipoma on the Dorsum of the Foot in a 9 year old girl:A case report and review of the literature. Fortune journals. 2017 Oct 23;(ISSN:2575-9655):4.
4. Agu Thaddeus chika, Agu Thaddeus Chika., An unusuval presentation of Lipoma on the Dorsum of the Foot in a 9 year old girl:A case report and review of the literature. Fortune journals. 2017 Oct 23;(ISSN:2575-9655):4.

5. Agu Thaddeus chika, Agu Thaddeus Chika., An unusuval presentation of Lipoma on the Dorsum of the Foot in a 9 year old girl:A case report and review of the literature. Fortune journals. 2017 Oct 23;(ISSN:2575-9655):4.
6. Acharya, Y. T. Sushruta Samhita with Nibandhasangraha commentary (sutra stana Granthi -Astavidha shastra karma adhyaya ) by Dalhana and Nyaya Chandrika Panjika of Sri Gayadasa, p.(9<sup>th</sup> ed).Varanasi: Chaukhambha Orientalia; reprint edition 2009.
- 7.Susruta Samhita of Maharsi Shusrut by Kaviraj Ambika dutta Shastri, edited with Ayurveda Tattva Sandipika, published by Chaukhambha Sanskrit SamSamsthan, Varanasi, reprint 2012, Vol.-I, Chikitsasthana-18/17-19, pg. no.-105.7.
- 8.Charak Samhita by Acharya Vidhyadhar Shukla & Prof. Ravidutt Tripathi, Charaka Samhita with Vaidhya Manorama hindi Commentary, Delhi Chaukhambha Sanskrit Pratishthan, reprint-2015, Vol.-II,Chikitsasthana 12/82-83, pg. no.-284.
9. Agu Thaddeus chika, Agu Thaddeus Chika., An unusuval presentation of Lipoma on the Dorsum of the Foot in a 9 year old girl:A case report and review of the literature. Fortune journals. 2017 Oct 23;(ISSN:2575-9655):4.

