PSG MediPulse

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PSG SETS IN MOTION MILK BANK

Inauguration **KAMADENU**, Mother's Milk Bank on 4th August 2022 at B-block, Pediatrics Ward, 1st floor, PSG Hospitals.

A mother's breast milk is the best and most complete source of nutrition for a baby. It provides all the necessary nutrients and protective components needed for growth and development. Some mothers and babies face difficulties in breastfeeding. When a mother, for some reason, is unable to feed her infant, her breast milk should be expressed and fed to her baby. If mother's own milk is unavailable or insufficient, the next best option is to use Donor Human Milk.

psgmedipulse@psgimsr.ac.in
www.psghospitals.com
+91 82200 13330

Human Milk Bank is a place which helps in processing the Donor Human Milk and makes it safe for the receiving baby . There are steps in selecting the suitable donor, who is then counseled, educated and consent is obtained. Then the milk is collected, processed and stored at suitable temperature in the Milk Bank and the processed milk is made available to the baby who is in need. Mainly babies in NICU, preterm and Low birth weight babies are benefitted by the Donor Human Milk from the Milk Bank. At all stages from collection through processing to dispensing, steps are taken to make sure the safety and sterility is met as per the standard guidelines.

Donor Human Milk (DHM) provides a complete source of nutrition when compared to formula milk by retaining many of the immune components that are lacking in formula milk.

We at PSG Hospitals, Coimbatore are very glad to take the initiative to make this a possibility for mothers and babies. Our Milk Bank is named as "Kamadenu- The Mother's Milk Bank" which would be functioning from the coming week (August 8, 2022).We had our inauguration today (August 4, 2022).

Dr. D. Brindha, Principal, PSG College of Arts and Science graced the occasion as our chief guest. We as a team have decided to go with providing this service initially only to our in-hospital babies at the NICU and wards and steadily make it available for outside use as well. The donation is on voluntary basis from our in-hospital mothers and other voluntary donors from outside as well. PSG Hospital Milk Bank works on a non-profit basis and the recipient would be charged a nominal amount as a processing fee. We would function to the best of our abilities to serve the mothers, babies and families in this region.

HAGLUND DEFORMITY (HD) – ENDOSCOPIC CALCANEOPLASTY – NEWER, SAFER AND AN EFFECTIVE APPROACH

Dr. N. Venkatesh Kumar,
D.Ortho., DNB. Ortho.,
Fellow in Arthroplasty & Arthroscopy (Germany)

Dr. P. Sathyamurthy,
M.S. (Ortho), DNB. (Ortho).,
MNAMS., MRCS (UK)
Department of Orthopedics,
PSG IMS&R

Introduction

Haglund deformity (HD), commonly called as pump bump is a degenerative process characterized by osteophyte formation at the posterolateral part of calcaneum, retrocalcaneal bursitis and calcifying metaplasia at insertional site of tendoachilles.

HD is more common in the young and middle aged with slight preponderance in females. It is often bilateral, mostly idiopathic, but also due to systemic inflammatory disorders, occupation related, obesity and drug related

HD presents with posterior heel pain, more on walking after a period of rest and with an obvious bump in the posterior aspect of heel. It should be differentiated from plantar fasciitis, a common cause of heel pain, by anatomical location of pain and tenderness (Haglund deformity – posterior heel pain and tenderness, plantar fasciitis – plantar aspect of heel pain and tenderness). HD is made out usually by means of x ray where a bump is well noted in the calcaneum and measured by various parameters which mainly includes kager triangle and chauveaux liet angle. At times a MRI shall be helpful in doubtful cases.

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Conservative management is to be tried initially with rest, ice packs, shoe wear modification and analgesics. Once recalcitrant, surgery is to be considered. The traditional way of surgery is by open method with tendon splitting or tendon sparing approaches where a burr or osteotome is used to shave off the bump. Endoscopic calcaneoplasty, a newer advent is much less invasive and efficient alternative to open method, where post operative pain and rehabilitation is better and avoids iatrogenic tendon rupture and calcaneum fractures

COMPARISON BETWEEN OPEN VERSUS ENDOSCOPIC APPROACH FOR HAGLUND DEFORMITY

PARAMETERS	OPEN DECOMPRESSION	ENDOSCOPIC DECOMPRESSION
INFECTION	↑	↓
TENDON RUPTURE	↑	NIL
REHABILITATION	NEED OF CASTING AND NON WEIGHT BEARING WITH RETURN TO WORK AFTER 6 MONTHS	NO CASTING, WEIGHT BEARING FROM DAY 0, RETURN TO WORK- 1 MONTH
SKIN BREAKDOWN	↓	NIL
BLOOD LOSS	↑	↓
POST OP PAIN	↑	↓
LEARNING CURVE	EASY	DIFFICULT
CALCANEAL FRACTURE (IATROGENIC)	+	NIL

Here we discuss the case of Haglund deformity managed with endoscopic calcaneoplasty at our institution

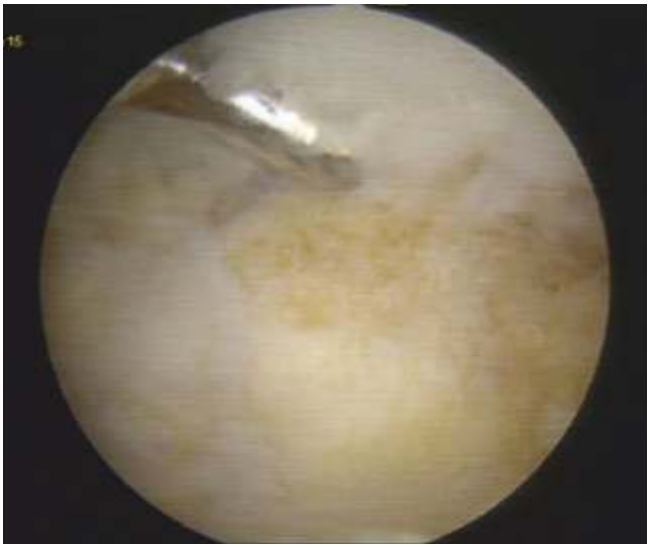
Case Report

50 Year old gentle man, working as a scavenger which involves more of physical activity in form of walking, squatting and climbing presented with complaints of posterior heel pain for the past 2 months He was initially managed conservatively. Despite conservative management, patient didn't have pain relief. He found difficulties in performing his work and hence couldn't attend his work. He was diagnosed clinicoradiologically as a case of left calcaneal Haglund deformity. For which He was planned for endoscopic calcaneoplasty then considering the significant pain and speedy rehabilitation so that he can join his work at the earliest possible.

Under spinal anesthesia, he was put on prone position.

Under tourniquet control, through three portal technique (posterolateral proximal, posterolateral distal and poster medial distal) with 4 mm endoscope, Haglund deformity made out.

Using a burr, bump was decompressed cautiously without injuring the Achilles tendon. Through endoscopy, decompression confirmed by tendon not impinging the posterosuperior part of calcaneum while dorsiflexing the ankle.



Also adequacy of excision confirmed with c – arm guidance.

Post Operative X-ray showing deformity correction

Our total operating time was one hour and blood loss was minimal (less than 10 ml).

Patient then was shifted to ward in stable condition. After 6 hours, he did walk around with utmost pain relief. His post operative period was uneventful, where he was advised ankle pumps, eccentric tendoachilles strengthening exercises and tolerated weight bearing.

He was discharged to home on the second post operative day.

Wound Status on Post Op Day 1

Discussion

Haglund deformity, a common cause of heel pain warrants proper management either conservative or surgical. Out of chances of acute tendon rupture, intralesional steroids are seldom given. Traditional open surgery, although rewarding, has its own cons in the form of infection, skin breakdown, chances of calcaneum fractures and tendon ruptures with a prolonged rehabilitation which causes significant financial burden. Endoscopic calcaneoplasty is promising in that it minimizes infection, wound issues, post operative rehabilitation duration and almost eliminates the chances of tendon rupture and calcaneum fracture. Apart from its steep learning curve, endoscopic calcaneoplasty appears a promising tool in management of Haglund deformity.

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AMELOBLASTOMA OF MANDIBLE : Resection & reconstruction with Iliac Bone graft - A case report

Prof. Dr. R.Saravanan, MDS
Faciomaxillary Surgeon & Implantologist
PSG Superspeciality Hospital

Abstract:

Ameloblastoma is a benign locally invasive epithelial odontogenic tumour arising in the jaws. It is commonly found in the third and fourth decade in the molar ramus region of the mandible. Among all types of ameloblastoma, multicystic ameloblastoma is believed to be locally aggressive lesion that has the tendency for recurrence. In this report we present a large multicystic ameloblastoma in the right body-ramus region of the mandible in a 36-year-old woman. This large lesion was diagnosed with the help of CT and was successfully managed by resection (hemimandibulectomy till first molar) with simultaneous reconstruction using iliac crest bone.

Ameloblastoma is a slow-growing benign neoplasm of odontogenic epithelium that has a strong tendency to local invasion and that can grow to be quite large without metastasizing. It can be found both in the maxilla and mandible. Although 80% are situated in the mandible with the posterior ramus area being the most frequent site. The neoplasms are often associated with the presence of unerupted teeth, displacement of adjacent teeth and resorption of roots. Rare examples of distant metastasis of an ameloblastoma in lungs or regional lymph nodes do exist. It has an aggressive and recurrent course and is rarely metastatic. Radiographically it shares common features with other lesions such as the giant cell tumor, aneurysmal bone cyst, and renal cell carcinoma metastasis; a definitive diagnosis can only be made with histopathology.

It was recognized in 1827 by Cusack. This type of odontogenic neoplasm was designated as an adamantinoma in 1885 by the French physician Louis-Charles Malassez. It was finally renamed to the modern name ameloblastoma in 1930 by Ivey and Churchill.

While these tumours are rarely malignant or metastatic and progress slowly, the resulting lesions can cause severe abnormalities of the face and jaw leading to severe disfiguration. Additionally, as abnormal cell growth easily infiltrates and destroys surrounding bony tissues, wide surgical excision is required to treat this disorder. Symptoms include a slow-growing, painless swelling leading to facial deformity. As the swelling gets progressively larger it can impinge on other structures resulting in loose teeth and malocclusion. Bone can also be perforated leading to soft tissue involvement. The lesion has a tendency to expand the bony cortices because the slow growth rate of the lesion allows time for the periosteum to develop a thin shell of bone ahead of the expanding lesion. This shell of bone cracks when palpated. This phenomenon is referred to as "Egg Shell Cracking" or crepitus, an important diagnostic feature.

Maxillary ameloblastomas can be dangerous and even lethal. Due to thin bone and weak barriers, the neoplasm can extend into the sinonasal passages, pterygomaxillary fossa and eventually into the cranium and brain. Rare orbital invasion of the neoplasm has also been reported.

Case Presentation :

A 36 year old woman presented to the Dept of General Surgery, PSG IMSR, with a swelling over the right mandible & parotid region over past 3 months. Swelling was insidious in onset & gradually increased to the present size. H/o Dentigerous cyst on the posterior right mandible 15 years back & enucleation was done. The patient had altered sensation over the right cheek region.

On examination, there was a solitary ill defined swelling over the right middle & lower third of the face measuring 4x6 cm. Swelling was firm to hard in consistency was present over the right parotid region & angle of mandible extending medially upto 5 cms from midline. The surface was smooth & the skin overlying the swelling was stretched and was of normal colour. It was tender & immobile with severe trismus. No clinical palpable lymph nodes.

Pre Surgical OPG

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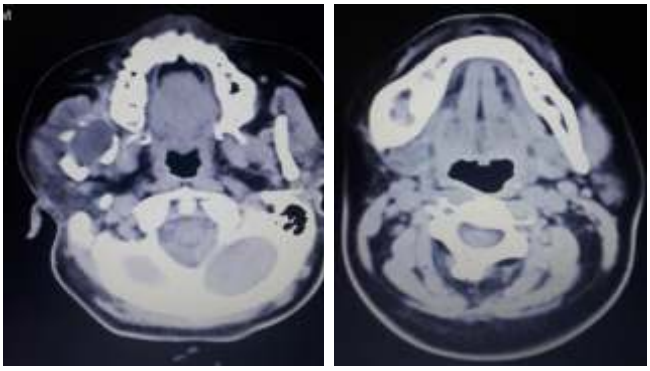
An intraoral examination revealed an ill-defined solitary swelling in the right lower posterior buccal vestibule. It was non-tender and hard in consistency with buccal and lingual cortical plate expansion. There were clinically missing teeth 47 and 48. Considering the clinical findings, a tentative diagnosis of benign tumour of the left side of lower jaw was made. Ameloblastoma was thought as first in the list of differential diagnosis as it is the most commonly occurring tumour in the mandibular molar ramus region in this age group & was confirmed with incisional biopsy.

Computed Tomography :

The axial CT of the jaw revealed a very large well-defined radiolucent expansile lesion in the right body and ramus of the mandible with multilocular appearance causing expansion of the body and ramus.

Chest radiography did not show any evidence of metastasis.



Treatment :

As the lesion was very extensive, a resection (hemimandible till right first molar region) was performed along with reconstruction using iliac crest bone which was combinely done by The Dept. of General Surgery & Dept. of Maxillofacial Surgery at PSG Super Speciality Hospital

General Surgery procedure – Anterolateral cervical incision was made 2-3 cms below the angle of the mandible. Flap was raised. Mandible dissected from its attachment & splitting of mandible done at the level of 2nd molar tooth. Mandible retracted laterally & internal attachment separated. TMJ condylar process was removed along with the ameloblastoma. Articular surface was intact and clearly visible.

Maxillofacial Surgery procedure – Incision placed in the left iliac crest & bicortical iliac graft of 5x2 cms along with fat pad of 3x2 cms was harvested. Donor site was sutured after achieving hemostasis in layers & suction drain was placed. Erich Arch bars were placed in the maxillary & mandibular arches & intermaxillary fixation was done to achieve occlusion. A 2.5 mm titanium recon plate with condyle was placed in the anatomical position and stabilised with 2.5 mm titanium screws in the body of the mandible. The harvested iliac bicortical graft was fixed to the ramal arm of the recon plate with screws. Mouth opening was checked with the reconstructed condyle.

Suturing was done intra orally and externally in layers. Patient was on ryles tube feed for a week and discharged after being hemodynamically stable and improved clinically.

The postoperative period was uneventful. The patient's aesthetics and function was restored. The patient was followed up for 10 months with no evidence of recurrence. Currently the patient is under follow-up

Harvested Iliac Bone Graft

Mandible resection

Reconstructed Mandible with Iliac Graft

Post Surgical OPG

Discussion:

Ameloblastoma is a benign locally invasive epithelial odontogenic tumour presenting as a painless, slow growing hard mass. Radiographically, the tumour area appears as a rounded and well-defined lucency in the bone with varying size and features. Numerous cyst-like radiolucent areas can be seen in larger tumours (multi-locular) giving a characteristic "soap bubble" appearance. A single radiolucent area can be seen in smaller tumours (unilocular).

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AMELOBLASTOMA OF MANDIBLE : Resection & reconstruction with Iliac Bone graft - A case report

General Surgical and Maxillofacial Team

Differential diagnosis : Keratocystic odontogenic tumour, Central giant cell granuloma, Odontogenic Myxoma.

The aim of treatment and surgery is to remove the entire tumour with a margin of surrounding tissue (block resection) for a good prognosis. Preferable removal includes 10mm of normal bone around the neoplasm. Larger ameloblastomas can require partial resection of the jaw bone followed by bone grafting.

Conservative treatment requires very careful case selection. Smaller mandibular neoplasms have been enucleated where the cavity of the tumour is curetted, allowing preservation of the bone cortex and the lower border of the mandible. Although, recurrence rate for this type of treatment is higher. Unicystic ameloblastomas—called intraluminal unicystic or plexiform unicystic ameloblstomas can be enucleated, as the epithelium is only limited to the inner cyst wall and lumen.

There are different methods of mandibular reconstruction of large defect with microvascular surgery using donor site from fibula, iliac crest, scapula and radial forearm based on the tumour involvement.

In our case as well tumour was treated with resection of unilateral mandible till first molar region, as it was quite an extensive lesion involving body as well as the ramus of the mandible and simultaneously reconstruction using iliac crest bone was done which reduces the morbidity while retaining the aesthetics of the patient.

Recurrence :

The chance of recurrence seems to be more dependent on the method of surgical treatment. In general, annual follow-up for at least 7 to 10 years is recommended. Few authors have recommended annual follow-up for 5 years and thereafter once in every 2 years till 25 years. Our patient is also under follow-up with no evidence of recurrence till now.

SOCIAL ACTIVITIES

Bone and joint day 4 August 2022 was observed by the department of orthopaedic.
Awareness rally conducted

CME at Palani conducted by Dr. Pradeep in association with IMA Palani department of Cardiothoracic surgery and Heart Transplantation department

General health camp conducted at Karumbukadai. Coimbatore