# **PSG Medi Pulse** HOSPITALS

## News Medical Surgical General

## Patrons

: Dr.S.Ramalingam Dean Director : Dr.J.S.Bhuvaneswaran

## **Editorial Board:**

Dr.Vimal Kumar Govindan Dr.Pavai Ganesan Dr.T.M.Subba Rao Dr.Muruganand Mylswamy Dr.Deepa Lakshmi



## **PSG HOSPITALS**

Peelamedu, Coimbatore -641004

psgmedipulse@gmail.com

R www.psghospitals.com

0 +91 82200 13330

For Emergency : +91 74491 08108

# **PSG Medical students** to learn the Art of Medicine



#### The Covai Mail

PSG Institute of Medical (PSG on Wednesday that it has considerably. collaborated with Univ.of Duesto, Spain to introduce a KSHEMA, in its UG Program.

a part of Tuning India Project Ramalingam, with a humane touch -which Officer, PSG IMS&R. requires communication skills, the ability to understand the social and cultural context of illness, and health care", a press note from PSG IMSR

elegantly pointed out.

This is the need of the hour, as many fear that the humane Science and Research approach towards the field of IMSR) announced medicine is getting reduced

This course is named Emotions through Fine Arts. short for course on Medical Humanities Knowledge and Skills in this course young minds get Humanities, Ethics, Morals an opportunity to interact with This course is introduced as and Attitude. Dr. Sudha and draw their inspiration co-funded by Erasmus+. It aims Research and Innovations, to groom students in the Art PSG IMS&R is the course co- practicing medicine. of Medicine. "Medicine as an ordinator and she is assisted art means giving medical care by Dr. G. Sumitra, Academic that last year, the students had

empathy, self- the future doctors practice Shantha, Chairman of Adyar awareness, ethical practice, the art of Medicine. It is Cancer Institute. professionalism, along with taught in 2 modules and includes to Medical Humanities, History of Ethical and Humanitarian

Principles in Health Care. Social Determinants of Human Values. Health. Gender Sensitivity, Culture Sensitivity, Fine arts in Health and Healing and Expressing

The college said that through Director, from the Doyens in Health care who exemplify the art of

The press release further said the privilege of meeting and KSHEMA aims at making interacting with Late Dr. V.

> Students are motivated to Introduction participate in this program and exemplary students are Medicine, recognised with an annual award.

## Message

### குறள் :

பிறவிப் பெருங்கடல் நீந்துவர் நீந்தார் இறைவன் அடிசேரா தார்

### சாலமன் பாப்பையா :

கடவுளின் திருவடிகளைச் சேர்ந்தவர் பிறவியாகிய பெருங்கடலை நீந்திக் கடப்பர்; மற்றவர் நீந்தவும் மாட்டார்

# Medical

2 லக நீத்தீறை தீன நீனைவிற்கு... மார்ச் 19, 2021 உலக நீத்தீரை நாளில் தாக்கம் யாவர்ன் ஏக்கம் தாங்களதே தம்பீ தூங்களும் :– அந்தக்காலம் தாங்களும் தம்பீ தூங்கனும் :– அந்தக்காலம் நல்தூக்கம் கெடிடால் நண்பகலில் கொடிாவி விடால் நீ தூங்காவிடால் உனை நோய்கள் பல தொடும் உன் ஊக்கம் தீனம் கெடும் போதீய தூக்கம்

தூக்கத்தை வாங்க எவரால் முடியும் நல்ல தூக்கம் ஆரோக்கிய வாழ்வீன் அங்கீகாரம்

World Sleep 20 prostagos

## **உலக தண்ணீர் தீனம் 2021** மார்ச் 22, 2021

### நீரை மதிப்போம்!

பன்குடமாய் இருந்து பக்குவமாய் ப்றக்க பல உருவம் கொண்டு... நம் உடன் வாழ்ந்து உடலை நனைத்து உடையை துவைத்து உண்ண உணவைத் தரும் தண்ணீரை மதப்போம் தண்ணீருக்காக கண்ணீர் வீடும் மக்களின் துயரம் துடைப்போம் எண்ணைய் கணறுகளாய் தண்ணீர் கணறுகளை பணமயக்கும் பாதகம் எதிர்ப்போம்! தண்ணீர் செல்வத்தோடு தன்னீறைவை அடைவோம் வளர்க நீர்வளம்! வாழ்க உயர்கள் யாவும்!!







## A RARE CASE OF PVNS OF THE FOOT













SPECIMEN Biopsy, right foot GROSS FEATURES

Grossed by: Drs.R. Kavvya / Ruveka V Received two containers labelled as tissue biopsy and bonebiopsy now relabelled as A and B

A. Contains eight fragments of pale brown tssie mea. 0.5 to 0.8 cm in greatest dimension. A. B bits, All embedded.

#### MICROSCOPIC APPEARANCE

A Sections studied show fragments of fibrocollagenous and fibroadipose tissue lined by hyperplastic synovial epithelium showing nodular / papillary appearance at places. A neoplasm composed of sheets of two population of cell is noted. One population of cell is small with ovoid nucleus. The other population of cell has abundant eosinophilic cytoplasm with vesicular nuclei. Some of these cells show peripheral rim of hemosiderin granules.

Admixed among these cells are local collection of foamy histiocytes, pigment lade macrophages and occasional osteoclast type of grant cells. Less than 5 mitosis / 10 HPF is noted. The intervening stroma shows many thin walled blood vessels.

B. Sections studied shows degenerated bony spicules showing local collection of foamy histiocytes and tiny fragments of neoplasm as described in A.





KOVAI WIRI & GI SGAN GENIKE KOVAI SCAN CENTRE BUILDING, Tatabad 5th Street, Combatore - 12 Ph : 0422 - 2490099 2490399 4372099 REPORT

MRI • MULTISLICE SPIRAL CT SCAN • ULTRASOUND • MAMMOGRAM • DIGITAL X-RAY • COMPUTERISED LAB

Patient Name :MISS LYNN SAUD 18 Yrs Ref. Doctor :PSG HOSPITAL Date :04/11/2020

MRI of the Rt.Ankle with Foot

Thank you for referring this patient.

TECHNIQUE

Axial, Coronal & Sagittal PDFS & 3DT2.

#### OBSERVATIONS

There is lobulated T2 hypointense mass (6.1 x 2.8 x 2.3cm, AP x CC x TR) seen encasing peroneus longus and peroneus brevis tendons in the lateral aspect of Rt.foot in subcutaneous plane. No calcification in the mass.

The mass is eroding cuboid bone and minimally extending into it.

Similar smaller lesion  $(1.5 \times 1.1 \times 0.7 \text{cm})$  adjacent to the medial aspect of base of cuboid bone and anteromedial aspect of calcaneum and causing minimal erosion in them.

Alignment of the bones is normal. Minimal fluid in the tibiotalar, subtalar and talonavicular joint.

Medial compartment

Medial malleolus is normal Posterior tibial tendon is normal Flexor digitorum longus tendon is normal. Flexor hallucis longus tendon is normal. Deltoid ligament complex - Superficial: Normal. Deltoid ligament complex - Deep: Normal.

Lateral compartment

Lateral malleolus is normal. Anterior and Posterior inferior tibiofibular ligaments are normal. Anterior talofibular ligament is normal. Calcaneofibular ligament is normal. Posterior talofibular ligament is normal.



Pigmented VillonodularSynovitisis described as abnormal proliferation of the synovium, by hyperplasia, and abnormal tumor like growth either villous or nodular form. Tendon sheath and sacs lined by synovial cells can have abnormal growth, with proliferation of stromal cells, and large quantities of intra and extracellular hemosiderin with multinucleated giant cells.

These lesions involve a spectrum of surrounding tissues like bursae, bone, tendon sheath with or without joint infiltration. Synovium based lesions did cause pressure on bone and erosion. In separate studies Miller in 1982 and Flandry et al. in 1994 determined the overall incidence of PVNS varied between 1 and 3 per 1,000,000.

In 1852 Chassaignac was the first to describe a nodular lesion that originated in the flexor tendon sheath of the finger.

In 1942 Simon described a localized form and 1909 Moses described diffuse type.

However in 1941 Jafee et al coined the term as Pigmented Villonodular synovitis .

Currently based on Granowitz et al PVNS is only used for intra articular lesions.

Hence PVNB refers to Pigmented Villonodular nodular Bursitis and PVNTS implies for lesions originating from tendon sheath, and can be also known as Tenosynovitis.

Currently World Health Organization considers Pigmented Villonodular Synovitis as Giant cell tumour.

Since 1941 year onwards till date the treatment remains challenging with unknown natural history outcome.

Open surgery is the standard treatment. Monoclonal injections and external beam radiation are controversial and proven to have its own risks like accelerating the lesion or induce tumor like cells.

Granowitz et al classified PVNS into two forms localized nodular form and diffuse form based on treatment and clearly stated that localized nodular form has less chance of recurrence where as the diffuse form is recurrent and calls for aggressive approach and excision of mass.

Oehler et al remarked clearly that iron in lesion stimulated the synoviocytes and other cells to develop macrophage like characteristics.

Usaually surface of normal synovium is flat or covered with finger like projections to all soft tissue to change shape as joint moves, Beneath intima synovia have dense network of small blood vessels that provide nutrients for synovium and the avascular cartilage.

Pigmented Villonodular synovitis usually affects patients in age group in the third to fouth decade with no sex predilection In our case the patient was 18 years old female.

The incidence varies in literature reports but most commonly quoted 1-3 in a million, with some studies quoting more common in females.

The knee joint has the highest incidence of 75% followed by hip and ankle.Heller Sl ,O Loughin and Dr Carlo G ET al reported incidence of 2.5% of PVNS in foot and ankle. Localised type involves a discrete nodular to lobulated mass, in ou case primarily arising from calaco cuboid joint.

Differential diagnosis is Giant Cell tumoor, Synovial Sarcoma, Chondrblastoma or Tubercular tenosynovitis.

Due to vague presentation patterns the MRI and open biopsy are the gold standard of management protocol in suspected case of PVNS.

#### **Case Representation:**

18 old female complained of swelling and gradual onset with positive history for pain over the right lateral aspect of foot since 5 years. And very occasional pain sensation on weight bearing, walking a certain distance up to 10 meters.

Was apparently alright since the swelling started without pain with insidious onset of increase in the size and shape of the swelling. Pain aggravated on weight bearing. There was no history of injury or fever, no history of other joints swelling or any history suggestive of Koch's. No medical treatment was taken else where.



### ON Examination of right foot:

Situation : Dorsolateral aspect of foot extending to midfoot to hindfoot. Extending from 4<sup>th</sup> metarsal to inferior aspect of lateral malleolus .Anterolateral aspect of fore foot and hindfoot extending posterior lateral aspect of hind foot.

Extent of swelling was 9 cms \* 4.5 cms, hemispherical to ovoid shape, surface begin smooth, Lobulated, with edge's outlined clearly posterolaterally, anterior edges were indistinct.

No visible scars or prominent veins and no visible pulsations.

Swelling apparently caused no pressure effects of any neurovascular structures.

#### **ON Palpation:**

No warmth , no tenderness mid foot around calcaeno cuboid joint , surface is smooth and consistency cyctic. Non reducible swelling.

Not fixed to skin, mobile along the tendon, becomes more prominent when foot is everted against resistance.

Movements of ankle and subtalar joints were pain free while midtarsal joints movements were mildly painful.

**Measurements :** 9cms \* 4.5 cms Swelling 2 cms inferior to Lateral malleolus

Investigations : Xrays of foot AP and Oblique showed erosion of cuboid with soft tissue density enlarged.

No obvious osteolytic lesion was made out.

**USG :** Reported as following : On 04/11/20 reported as there is a large ill defined hetero echoic collected on the dorsum of right foot. Measuring approximately 3.3 \*1.4 \*3.2 cms. The collection seems to communicate with the subtalar joint space. Possibility of tuberculosis to be considered.

### MRI done else where reported on 04/11/20 as follows:

- 1. Lobulated T2 hypointense mass ( 6.1 \* 2.8 . 2.3 cms AP \* CC \* TR) Encasing peroneus longus and peroneus Brevis tendons in the lateral aspect of foot In subcutaneous plane. No Calcification in the mass.
- Mass is eroding cuboid bone and anteromedial aspect of calcaneum and causing minimal erosion in them.
  To consider possibility of Pigmented Villonodular synovitis of tendon sheath origin. Other possibility is Giant cell tumor of tendon sheath origin.

Incisional open biopsy was done under SA on 10/11/20 in our Institution.

It was reported as Pigmented villonodular synovitis.

On 25/11/20 under SA open radical excision was done , the calcaneo cuboid joint subluxated and hence it was relocated and transfixed with a 'K' wire.

Literature quotes enbloc resection, inour case there was minimal erosion of cuboid bone of right foot and mass was dissected out of the peroneal tendons and Extensor Digitorium Brevis.

Follow up till date showed no signs of recurrence with complete healing and resolution of foot odema. Healed surgical scar and normal foot with active foot and toes movement.

by

Dr. C Prasanna - Unit Chief Dr. Uday Moorthy Dr. Anupam Gupta Dr. Karthi Dalyan Author : Dr. Agupta, Edited by Dr.Prasanna

# **Medical**

# What could happen if you don't sleep well?



A re you sleeping well ? Not many ask you this question but we should at least ask our friends, family and colleagues on World Sleep Day. This special day is observed since 2008 on a Friday of March. This year, its being observed on March 19th.



#### Value of Sleep Day:

"Awareness and Importance of Quality Sleep is increasing amongst the public now, and World Sleep Day has a significant role to play in that." Dr.J.S.Bhuvaneswaran, Director of PSG Super Speciality Hospitals happily shared.

"If a person is not able to sleep well, then it could be because of a disturbance in his sleep-cycle and on the factors that put him to sleep. Sleep-disorders don't just disrupt one's sleep, it even affects that person's heart and lungs," he added.

"So this World Sleep Day is a vital day for the medical fraternity to share with public about sleep, sleep-disorders, and what solutions are available for the sufferers."

#### Impact of improper sleep:

Dr.Sryma, Consultant at PSG Hospitals' Pulmonology & Sleep

## - answers PSG Hospitals

Medicine Department, shared that 'Obstructive Sleep-Apnea (OSA)' is the most common sleep-disorder that has many health consequences.

People who suffer this disorder snores a lot when they sleep. This abnormal snoring not just affects the person's breathing but also lowers his bloodoxygen level. If oxygen level in the blood decreases, it causes stress on the heart that leads to increased Blood Pressure, increased stroke-risks, day time lethargy etc.

#### **Other sleep disorders:**

Apart from sleep-apnea, there are so many other sleep disorders to discuss, like periodic limb-movement disorder (repetitive movement of the legs while sleeping), people falling asleep excessively in the morning, or while talking to others, etc.

Keep in mind that obesity is an important risk-factor of sleep-apnea. If the obesity is due to lifestyle habits, correction should be done to see that the body-weight is maintained on an ideal level.

The persons whose profession demand them to work at night – like Doctors, IT Professionals, Watchmen etc. – should make sure that they get at least 6 to 7 hours in the daytime.

#### How can doctors help? :

If you find your sleep to be unsatisfactory or something wrong with it, you should seek medical help. For

Keep in mind that obesity is an important risk-factor of sleepapnea. If the obesity is due to lifestyle habits, correction should be done to see that the body-weight is maintained on an ideal level.



married persons spouses shall be the apt ones to suggest.

At PSG Hospitals we have advanced polysomnography with video-monitoring. We'll analyze how the person sleeps first and then come to a diagnosis and provide treatment options that can be tailored to the patient's convenience and the medical aid to be taken.

