# **Surgical Learning**

ADVANCING SURGICAL STANDARDS

ISSUE

E-Bulletin for the Association of British University Surgical Societies (ABUSS), a committee of the Royal College of Surgeons of England

#### **Elections!**

#### 9th October

The elections for executive positions on the ABUSS committee will be held on the 9th of October 2015.

Any individual who has already held a position on the executive committee for at least a year is able to apply for the position of Chair.

The position of Vice Chair, Secretary and Publicity Officer are available to all ABUSS members to apply for.

Those interested in running for a position will do a speech (all speeches must be below 5 minutes) explaining to all those in attendance as to why they are running for the position, what experience they have, why they fell they are the right candidate for the job and what they want to do during their year on the executive committee etc.



#### This Issue

Giant Cell Tumours

Update

**Elections** 

## **Giant Cell Tumours of the hand**

Any neoplasm of the skeleton is referred to as a tumour, be it benign or malignant. Giant cell tumours of the hand are the second most common tumour of the hand only being superseded by ganglion cysts. They were first described by Chassaignac in 1852 as fibrous xanthoma and have since been referred to by multiple names, including localized nodular tenosynovitis, pigmented villonodular proliferative synovitis, benign synovioma, and pigmented villonodular tenosynovitis to name a few (1)(2)

**Pathophysiology** 

**Initial presentation** 

than men.

The exact pathophysiology of the condition is unclear but is has been associated with trauma to the hand. In animal studies replicable lesions have been produced experimentally by extra articular injections of blood into experimental animals<sup>(5)</sup>. Also retrospective studies involving large numbers of patients with giant cell tumours of the hand have found a history of trauma in 44% to 53% of patients<sup>(2)</sup>.

also marginally more frequent in women

#### **Epidemiology**

Pigmented villonodular synovitis (PVNS) is an uncommon benign neoplastic process that involves the synovium of the

joint diffusely or focally, it may also occur extra articular (2). The extra articular subtype of this disease process that affects the tendon sheath is termed pigmented villonodular tenosynovitis

(PVNTS) and is synterm giant cell tumour of the tendon

sheath (GCTTS). PVNTS is the most common form of PVNS and accounts for 75% of cases<sup>(2)</sup>.

GCTTS account for approximately 2% to 5% of all giant cell tumours<sup>(3)</sup>. They tend to not affect children or adolescents and have a peak incidence between the ages of 30 and 50 years<sup>(4)</sup>. The condition is



onymous with the Figure 1. Giant Cell Tumour of the Thumb

### **Patients** medical

often wait years before seeking advice these slow growing tumours rarely produce any symptoms until they are rather advanced in size. Symptoms associated with larger tumours are often painful because the tumour is compressing a local nerve and in-

flammation. Larger tumours also often invade the bone and degrade

joints resulting in loss of function of the effected digit. Patients that present early on in the disease process will often have a painless (non tender), immobile soft tissue mass in their dominant hand<sup>(1)</sup>. Lesions occur twice as often on the volar aspect of the hand as they do on the dorsal aspect and they tend to occur in the distal interphalangeal (DIP) joint of the middle, index

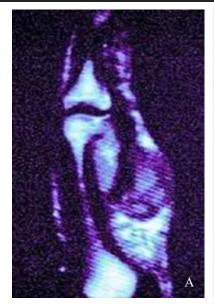
### RCS Bulletin Article

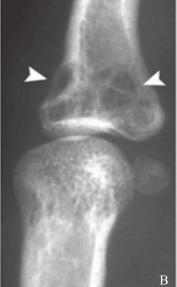
This months edition of the main Royal College of Surgeons bulletin will contain an exciting article! The article highlights the achievements such as the new "National undergraduate Curriculum in surgery" of the Medical Students' Liaison Committee and every constituent student surgical society.

More so its publication should hopefully aid to inspire and attract consultant interest in further helping undergraduate student societies!

## Handover document

This has now been sent out to all surgical society presidents! If you have not yet received it or have nay other questions, please feel free to email us!







**Figure 2.** (a) Typical T2-weighted MRI appearance of a giant cell tumor of the tendon sheath. Most of the tumor has intermediate signal intensity; the low signal intensity likely reflects signal attenuation due to hemosiderin deposition. (b) Oblique X-ray image of the thumb showing invasion of the bone (arrowheads). (c) Clinical photograph illustrating soft-tissue swelling involving the thumb.

finger and thumb most frequently (2)(4)(6).

#### **Aetiology**

Literature suggest there is yet to be a consensus as to whether giant cell tumours are neoplastic or inflammatory in origin<sup>(1)</sup>. Some considered them to be an inflammatory process arising as a consequence of chronic antigenic stimulation<sup>(5)</sup> and the suffix 'itis' present in many of the terms used to describe the condition is also indicative of this. However recent cytogenetic studies have reported genetic abnormality of trisomy of chromosome 7 and autonomous growth<sup>(5)</sup> which is suggestive of a neoplasm. Even though these tumours are often likened to malignancies due to their aggressive nature and ability to metastasize locally they are still considered to be benign in nature.

#### **Treatment**

Treatment options for GCTTS include surgical resection, radiotherapy and more recently pharmacological modulation  $^{(2)}$ . Surgical intervention is by far the most appropriate method of treatment. Curettage in conjunction with cryosurgery is recommended in order to minimalize reoccurrence of tumours from small satellite lesions  $^{(3)}$ . Radiotherapy is seldom a stand-alone treatment but is a very effect adjuvant therapy for the prevention of reoccurrence of tumours. Recent advances in the field have reported the effective use of infliximab a  $\alpha\text{-TNF}$  antagonist in the reduction of symptoms of the disease with pathologic examination reporting a marked decrease in the population of macrophages  $^{(2)}$ ; a cell commonly involved in inflammation.

#### **Prognosis**

The prognosis for patients with GCTTS is good with the vast majority making a full recovery and retaining function of the affected digit. Some complication from surgery may arise such as permanent loss of function due to nerve transection. The most common problem with GCTTS is recurrence of tumours. This can be due to incomplete resection during surgery or microscopic metastases that were yet visible enough to be excised. Nevertheless recurrence rates ranges from 7% to 45%<sup>(7)</sup>. Studies suggest post operative radiotherapy is able to reduce such figures to just 4%<sup>(8)</sup>.

In conclusion GCTTS is a term synonymous with PVNTS and represents a benign slow growing tumour that is the second most common tumour of the hand. Patients present with a immobile non tender soft tissue mass and possible local inflammation. Excision surgery is the optimum treatment and has a good prognosis when coupled with post-operative radiotherapy to reduce incidence of recurrence.



#### Nana Anim-Addo

Graduate medical student with a keen interest in plastic surgery

Year 4 Hull York Medical School

## **Upcoming Events**

#### **Undergraduate Surgical Conference**

Speakers are Shafi Ahmed, who broadcast the first live surgery using Google Glass - an excellent opportunity to hear about technology in surgery, and Dalia Nield who works with an all female team in oncoplastic breast surgery. Also - workshops, presentations, free lunch, certificates

Date: 24/10/15	Call for Abstracts: YES
Subject: Conference	Tickets: £10/15
	in- fo@scalpelmanchester.c om



#### RCS Student Surgical Skills Course

This RCS England course aims to introduce medical students to a safe surgical practice within a controlled workshop environment. Medical students will learn to use safe and sound surgical techniques that are common to all forms of surgery.

Date: 07/11/15	Call for Ab- stracts: No
Subject: Skills	Tickets: £55
www.rcseng.ac.uk	in- fo@scalpelm anchester.co m



#### **Recognising the III Surgical Patient**

Open to all medical students of all years!

A course that is full of interactive lectures, stimulated scenarios (taught by experienced doctors), live demonstrations and clinical skills session.

So even if your not interested in surgery, this course will bring you on a journey which you will definitely experience eventually in your medical career. Better sooner than later!

Date: 21/11/15	Call for Abstracts: ?
Subject: Conference	Tickets: £15-£20
	wmssurgicalsoc@gmail.com

#### Barts and the London 5th National Undergraduate Surgical Conference

We will be accepting abstracts that are on a surgical topic, or those relating to surgery.

We will consider from the following categories: -Original research -Audits -Case reports!

Date: 13/02/16	Call for Abstracts: Yes
Subject: Conference	Tickets: TBC
	conference@blsurgical.co.uk





## The Royal College of Surgeons of England

#### **Clinical Skills in Examining Orthopaedic Patients**

Following the successful careers advice days held over the last few years for trainees and medical students considering a career in orthopaedics, this course complements the 'So you want to be an Orthopaedic Surgeon' with a number of interactive workshops on clinical examination skills.

Date: 07/05/16	Call for Abstracts: No
Subject: Skills	Tickets: £`120
www.rcseng.ac.uk	

#### Systematic Training in Acute illness Recognition and Treatment for Surgery (START Surgery)

The aim of this interactive course is to advance the personal, theoretical and team working skills necessary for foundation doctors to manage acutely unwell or potentially critically ill surgical patients. The course is mapped to the foundation curriculum and attendance at the course can be used to provide evidence within the foundation portfolio of coverage of domains 3 (recognition and management of acutely ill patients) and 14 (working with colleagues) of the foundation curriculum.

Date: 21/11/15 & 30/01/16	Call for Abstracts: No
Subject: Skills	Tickets: £155
www.rcseng.ac.uk	

#### So You Want to be an Orthopaedic Surgeon?

The course provides a balanced view of the benefits and disadvantages of a career in orthopaedic surgery and a realistic perspective on the future for the specialty.

Date: 06/05/2016	Call for Abstracts: No
Subject: Skills	Tickets: £130
www.rcseng.ac.uk	

#### Surgical Skills for Students

This course is designed to teach you basic safe methods for performing simple surgical procedures and to allow you to perform and practise them on the bench using prepared animal tissue, simulations and various jigs.

Date: 23/11/15	Call for Abstracts: No
Subject: Skills	Tickets: £90
www.rcseng.ac.uk	education@rcseng.ac.uk

#### RCS Summer School in Anatomy and Practical Skills for Medical Students

If you are a medical student interested in a career in surgery or a surgically related specialty then register for the RCS anatomy and practical skills summer school. A sound knowledge of regional anatomy is essential if you are to perform surgery and many other practical procedures safely. (Registering Interest)

Date: TBC	Call for Abstracts: No
Subject: Skills	Tickets: TBC
www.rcseng.ac.uk	education@rcseng.ac.uk



#### Training the Trainers (Edinburgh)

To equip student and foundation doctors with an interest in surgery with the skills they require as teachers and learners at foundation level and beyond.

Date: 03/02/16	Call for Abstracts: No
Subject: Skills	Tickets: £100
www.rcsed.ac.uk	education@rcs.ac.uk

#### **Future Surgeons: Key Skills (Aberdeen)**

This one-day course was designed to address a lack of structured basic surgical skills training courses for medical students intending to follow a career in surgery. It aims to introduce participants to safe basic surgical techniques that are common to all surgical practices.

Date: 31/10/2015	Call for Abstracts: No
Subject: Skills	Tickets: £75
www.rcsed.ac.uk	l.whytock@rcsed.ac.uk

#### **Foundation of Clinical Surgery**

Systematic and structured introduction to history taking and clinical examination. To develop the skills of history taking and clinical examination. To understand surgical disorders in the context of basic sciences and mechanism of disease.

Date: TBC	Call for Abstracts: No
Subject: Skills	Tickets: TBC
www.rcsed.ac.uk	outreach@rcsed.ac.uk

#### **Student Research Symposium**

Run in conjunction with Edinburgh University, School of Surgery Day. The morning programme provides a forum for high quality student research to be presented in both oral and poster format. The afternoon session which focuses on research conducted by surgical trainees, gives medical students who have an interest in Academic Surgery an opportunity to engage and network with surgical trainees, consultants, academics' and senior clinicians.

Date: 04/12/15	Call for Abstracts: Yes
Subject: Skills	Tickets: £25
www.rcsed.ac.uk	outreach@rcsed.ac.uk

### How to Improve your surgical skills at home - A refreshing way to look at the acquisition skills and practice of surgery

This one day course is aimed at all aspiring surgeons and is based on the understanding that skill comes with practice. It is designed to give the attendee a frame work to practice basic surgical skills (stitching, knot tying and dissection) at home on low fidelity models and assess their progress using immediate visible feedback.

Date: 22/03/16	Call for Abstracts: No
Subject: Skills	Tickets: £135
www.rcsed.ac.uk	outreach@rcsed.ac.uk

#### **Surgical Anatomy of the Trunk**

The day will consist of a balanced mixture of overview presentations and practical demonstrations using cadaveric specimens and other teaching aids

Date: 19/10/2015	Call for Abstracts: No
Subject: Skills	Tickets: £85
www.rcsed.ac.uk	outreach@rcsed.ac.uk