**Welsh Paediatric Trauma Surgery Symposium 2019**

Educational Content Supervisor:  
Miss Claire Carpenter

Course Convenors:

Dr Samantha Leong   
 Dr Athanasios Karategos   
Mr Gianluca Gonzi

**Course Aims:**

Trainees in the disciplines of Surgery, Anaesthesia, Emergency medicine have limited exposure and preparation for paediatric trauma. This is compounded by the existence of the national Major Trauma Networks that limits the exposure of major paediatric trauma to trainees placed in rural DGHs. Moreover, trainees involved in paediatric major trauma often have a limited understanding of the role of surgical subspecialties in the acute and long-term management of the paediatric polytrauma. The aim of this course would be to impart core principles and skills in trauma surgery to surgical trainees.

We plan to use a mix of talks, small-group tutorials and practical workshops to train surgical trainees to competently assess and resuscitate paediatric trauma patients. We also hope to impart core surgical knowledge and skills in trauma surgery using porcine tissue models and mannequins.

**Participants**

This course is intended towards Core surgical trainees, ACCS trainees, Junior orthopaedic registrars, Junior general/paediatric surgical registrars with an interest in paediatric surgical specialties. A foundation in basic surgical skills courses, ATLS / ETC trauma course would be beneficial but not essential.

The target audience size would be 20 delegates

**Learning Outcomes:**

After attending the course, participants should be able to:

1. Describe a standard initial approach to the emergency surgery patient (RRIM: Recognition, Resuscitation, Investigation and Management)
2. Apply the RRIM model to the initial management of patients involved in major trauma
3. Demonstrate a range of operative skills

* Outline the core principles of damage control surgery
* Assess abdominal trauma
* Perform a laparotomy
* ICP monitoring and surgical decompression of expanding haematoma
* Debride full-thickness burns injuries
* Harvest and plant skin grafts
* Stabilise fractures with external fixation

**WPTS 2019 Modules:**

1. Assessment and Resuscitation of the severely injured child
2. Open tibial fracture external fixation
3. Trauma laparotomy and packing
4. Surgical decompression of expanding haematoma
5. Burns injury debridement, escharotomy and skin grafting

**Trauma Workshops:**

**Orthopaedic Workshop**

**Co-ordinator:** Miss Claire Carpenter **Faculty:** Miss Aureola Tong, Mr Simon Humphry, Mr Dan Winson

**5 delegates per workshop**

*Scenario: Orthopaedic Management of Open Tibial Fracture using External fixator Devices  
Sponsored by:*

Learning Outcomes:  
By the end of this workshop, delegates would be expected to

1. Understand the Classification of Open tibial fracture
2. Recognise the diverse surgical managements and role of External Fixator Devices in Open Fractures
3. Understand basic concepts of External Fixator Device placement

Content:  
In this workshop cross-specialty trainees would be given a 15 minute introductory talk on Open fractures along with principles and application of external fixator devices in children. Delegates may undergo formal assessment through Critical CEX / CBD should they wish.

***Plastic Surgery Workshop***

Co-ordinator: Mr. Wilson Jones and Burns Consultants from Morriston Hospital, Swansea

**5 delegates per workshop**

*Scenario: Acute management of burns injuries in the paediatric population. Demonstration of skin graft and hand / powered dermatome.*

Learning outcomes:

By the end of this workshop, delegates will be expected to

1. Understand the principles of resuscitation in major burns in children
2. Understand the role of skin grafting in children
3. Explain the indication for skin grafts, escharotomy and fasciotomy

Content

In this workshop cross-specialty trainees will be introduced through a short lecture on burns and skin grafting following a which a practical demonstration on models demonstrating skin grafting.

**Abdominal Injury Workshop**

**Co-Ordinator**: Mr. Stewart Cleeve   
**Faculty**: Miss Burnand, Mr. Burdall

**5 delegates per workshop**

1. Primary survey with resuscitation

2. Massive haemorrhage protocol (tranexamic acid and 1:1:1, personalised transfusion)

3. Interpretation of imaging (CT with/ without extravasation/blush, MOI, haemodynamic and clinical parameters)

5. Failure of non-operative management - when angio-embolization/operative intervention necessary (hybrid theatre).

6. Interactive MCQ

**Neurosurgical workshop**

Co-ordinator: Mr. Paul Leach

Faculty: TBC

**5 delegates per workshop**

1. Assessment and stabilisation of paediatric head trauma

2. ICP monitoring

3. Surgical decompression of expanding haematoma

**Course Layout**

08:30 – 09:00 Registration

09:00 – 09:10 Introduction and Course Ethos

09:10 – 09:25 Mr Stewart Cleeve – Primary Prevention of paediatric trauma

09:25 – 09:45 Mr Jordan Oldbury – A Surgical Trainee’s insight on being on-call during the Manchester Arena Bombing

09:45 – 10:10: Paediatric Department – APLS

* Differences between paediatric and adult patients
* Damage control resuscitation – introduction on principles and competence
* Moulage

10:10 – 10:35 Paediatric Neurosurgery – Management of paediatric head injury

10:35 – 11:00 Paediatric Orthopaedics – Bone injuries, stabilisation and fixation

11:00 – 11:15 Refreshments

11:15 – 11:40 Paediatric Plastics – Soft Tissue Injuries and Reconstructive ladder

11:40 – 12:05 Paediatric Surgery – A Surgeon’s role in Paediatric Trauma

12:05 – 13:00: Lunch / Poster competition

13:00 – 14:00 : Trauma Workshop 1

14:00 – 15:00 : Trauma Workshop 2

15:00 – 15:15 : Refreshments

15:15 – 16:15 : Trauma Workshop 3

16:15 – 17:15 : Trauma Workshop 4

17:15 – 17:30 : Closing remarks, Certificates and prizes