

Joint Clinical Meeting and Didactic Lecture

OSCE

September 3, 2008

Department of Emergency Medicine
Union Hospital

Case 1

12-year-old girl presented with a 2 days history of painful vulval swelling. There was no history of injury, no urinary symptoms, no vaginal discharge or bleeding. On examination, a swelling was detected over the right vulva.



- Q1. Describe the abnormal physical findings? (2 marks)
A tight band constricting the vulva with swelling of the distal part of the vulva.
- Q2. What is the diagnosis? (1 mark)
Hair tourniquet syndrome/Hair thread tourniquet syndrome.
- Q3. Which two parts of body are the most common affected site? (2 marks)
Toe and penis.
- Q4. What should be considered in every cases suffered from this problem? (1 mark)
Non-accidental injury/sexual abuse.
- Q5. What is the usual present in a infant with this syndrome? (1 mark)
Irritable baby presents in the night time

Case 2

30-year-old man presented with itchy skin rash and facial flushing 30 minutes after having a dinner in a fast food shop. BP was 115/80, P 96/min, SpO2 97% on room air. RR was 16/minute.



Q1. Describe the physical findings? (2 marks)

Congested conjunctiva.

Diffuse erythema over face and neck and well-defined erythematous plaque over anterior chest and abdomen.

Q2. What is the diagnosis? (1 mark)

Food allergy

Further history concerning the dinner reviewed that he had eaten French onion soup, bread with butter, baked tuna fish with rice and drunk cola. He had no history of allergy to all these food stuffs in the past.

Q3. What is the most likely diagnosis?(1 mark)

Scombroid poisoning.

Q4. What is the causative agent of this problem? (1 mark)

Preformed histamine on inadequately refrigerated fish.

Q5. How to treat this disease? (3 marks)

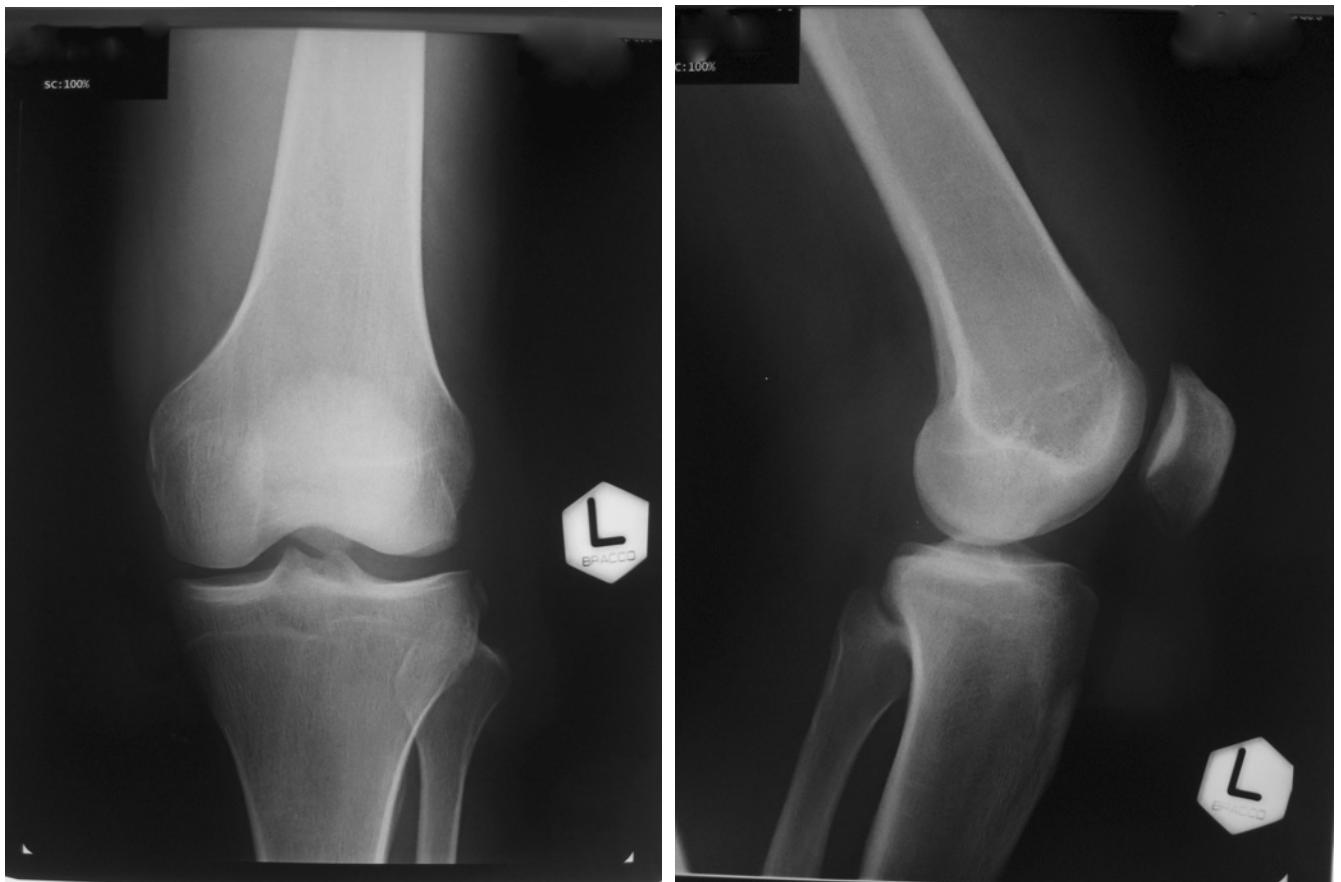
Anti-histamine for symptom control.

IV fluid for hypotension.

Bronchodilator for bronchospasm.

Case 3

28-year-old man presented with sprained left knee while playing football 3 hours ago. The mechanism of injury could not be remembered. X-ray of left knee was taken.



Q1. Describe the x-ray finding? (1 mark)

Avulsion fracture of the lateral aspect of the proximal tibia just below the tibial plateau.

Q2. What is the diagnosis? (1 mark)

Segond fracture.

Q3. What is the mechanism of the injury? (1 mark)

Internal rotation and
varus stress.

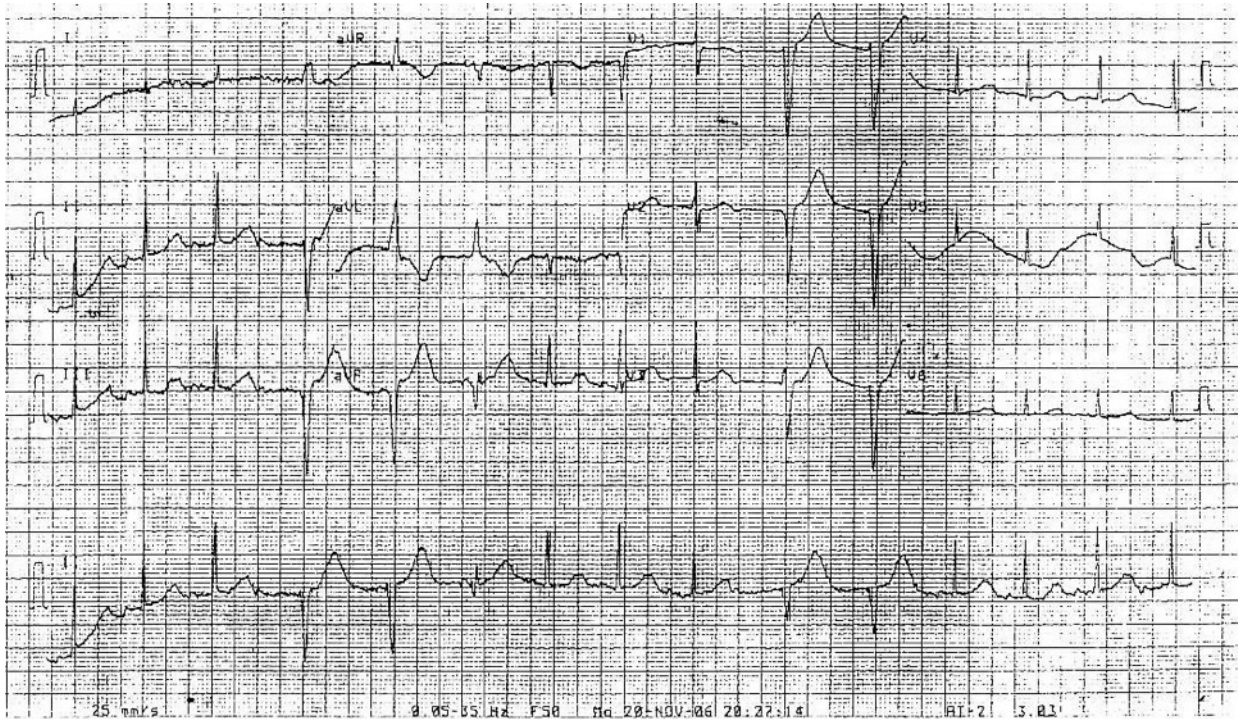
Q4. Name other associated injuries to look for in ED. (4 marks)

Tear of the anterior cruciate ligament (75-100%)
Injuries of the medial and lateral menisci (66-75%)
Avulsion fracture of the fibular head
Avulsion fracture of the Gerdy tubercle

Case 4

65-year-old woman, accidentally drunk herbal preparation intended for soaking of feet for leg pain. She attended ED 2 hours later for generalized numbness and repeated vomiting 2 hours later.

BP 63/34, P106/min, SpO2 92% on room air.



Q1. What is the ECG abnormality? (1 mark)

Multifocal ventricular ectopic.

Q2. What is the most likely offending toxin? (1 mark)

Aconitine (Aconitum Alkaloid) poisoning.

Q3. How would you treat the hypotension? (1 mark)

IV fluid and dopamine infusion.

Q4. How would you treat arrhythmia? (2 marks)

Amiodarone/flecainide for ventricular arrhythmia.

Magnesium may be effective.

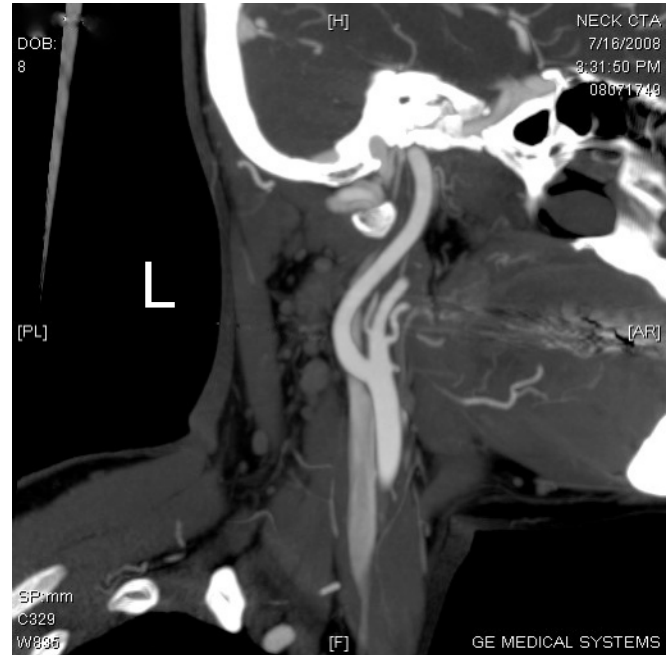
Q5. What treatment may be considered if the arrhythmia is drug-resistant? (1 mark)

Charcoal haemoperfusion.

Case 5

37 year-old lady who was a smoker and she enjoyed a good past health. She attended ED because of right side headache for 1/52 and numbness over left face and left hand for few hours. There were slurring of speech and decrease in sensation of tongue as well. She had sore throat and cough 1/52 ago and she was on flu medications and oral contraceptives. Urgent MRI brain with contrast showed scattered infarcts in the right hemisphere. Echocardiogram, ECG and blood tests were normal.

Further imaging was done in ward and the films were available.



Q1. What is this entity of imaging called? (1 mark)
CT angiogram

Q2. Providing the history and features of CT angiogram, what is the diagnosis? (1 mark)
Right internal carotid artery stenosis. (0.5 mark)
Right internal carotid artery dissection. (1 mark)

Q3. How do you derive the above diagnosis? (2 marks)
Hx- Young age, headache.
CT- Smooth tapering at the origin of the stenosis and normal appearance of other carotid vessels.

Q4. What investigation you can perform in ED that can verify your diagnosis? (1 mark)
Color flow doppler ultrasound.

Q5. List 3 predisposing factors of this disease. (3 marks)
Trauma, which can be trivial.
Connective tissue disease (Marfan Syndrome, Ehler-Danlos syndrome)
Hyperextension/rotation of neck (Practicing yoga, painting a ceiling)
Respiratory tract infection

Q6. What are the treatment options for this disease? (2 marks)

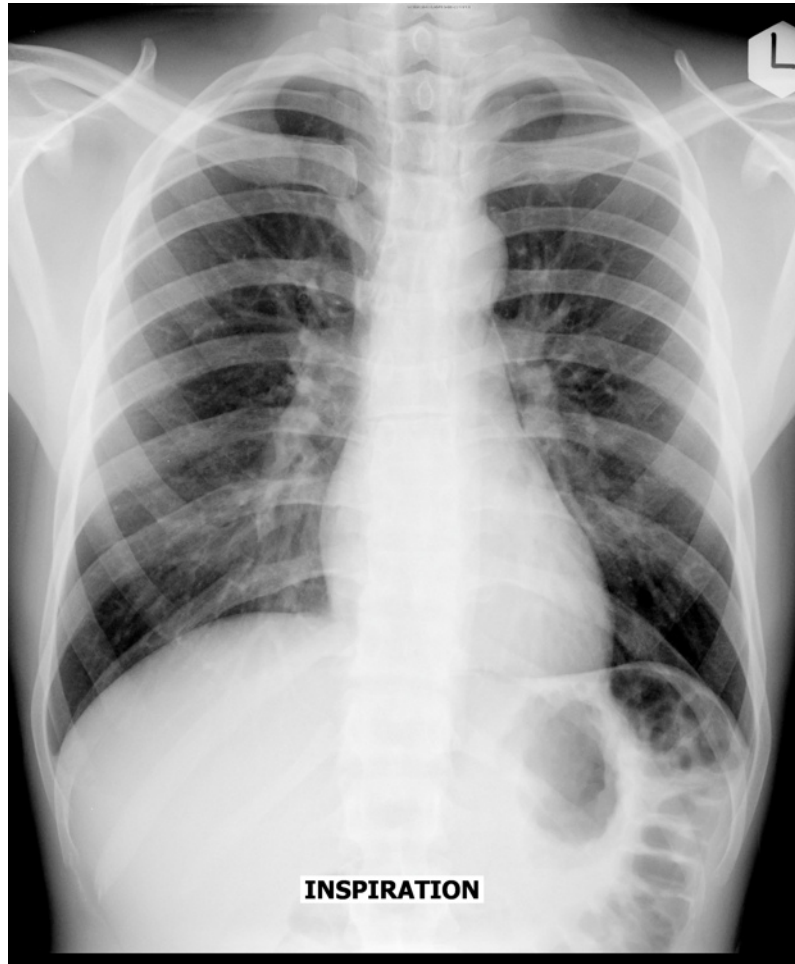
Medical- Anticoagulation

Surgery- Ligation of carotid combine with bypass surgery.

Endovascular balloon angioplasty and stenting.

Case 6

21-year-old man complained of chest and throat pain after chest contusion few hours ago in a soccer game. There pain increased on swallowing. BP 115/80, P92/min, RR 16/min. Strange noise was heard over precordium during physical examination.



Q1. What is the diagnosis? (1 mark)

Pneumomediastinum secondary to trauma.

Q2. What is the sign of hearing crunching noise in precordium, that is synchronous with heartbeat? (1 mark)

Hamman's Sign.

Q3. Name one important condition we need to rule out? (1 mark)

Rupture esophagus.

Q4. Name 3 other causes for this disease except the one in this gentleman. (3 marks)

Asthma
Forceful coughing
Severe vomiting
Mechanical ventilation
Cocaine inhalation
Parturition