

### **Complication in a Surgical Patient 3 – Notes for Candidate**

Role: Foundation Year 1 doctor on the post-operative ward

Presenting complaint: Leg Pain

This is Jason, a 52-year-old male who is on the post-operative ward with Leg Pain

Please take a brief history from this patient, you have 3 minutes to do so.

Then briefly outline to the examiner the physical exam you would do and what you would look for, you will have 2 minutes.

Then you will be asked to interpret some investigations for 3 minutes.

There will be 2-minutes of further questions from examiner at the end

## Complication in a Surgical Patient 3 – Notes for Actor

Patient demographics:

You are Jason Smyth, a 52 year old male recovering on the post-operative ward one day after a Tibial Fracture repair, when you develop Pain in your Right Leg. You ask to see a Doctor as you have a cast on and can't tell what's going on.

Presenting Complaint: Leg Pain

History of Presenting Complaint:

- Site: Right leg only, between Ankle and Knee.
- Quality: Constant deep ache
- Intensity: 8/10
- Timing: Began today a day after the surgery, never happened before
- Aggravating factors: Worse when stretching own toes
- Relieving factors: Paracetamol and Ibuprofen not working

Additional symptoms and Negative History (ONLY IF ASKED)

No pain anywhere else, No Difficulty Breathing, No Fever, No Vomiting, No other

Symptoms

ICE

I: None

C: None

E: You want the pain to stop

PMH + Surgical History:

- Osteoporosis
- Tibial fracture repair

Drug History

- Adcal-D3, No Allergies

Family History

- None

Diagnosis: Compartment Syndrome

## Complication in a Surgical Patient 3 – Examiner marksheet

History:

“Please take a brief history from the patient”

- Student takes a brief and focused history, SQITARS for Leg Pain
- Asks about relevant symptoms such as Fever and Shortness of Breath
- Quick scan of relevant PMHx, DHx (including allergies) and FHx
- Asks about what surgery the patient had

Examination:

“Please briefly state what examination you would do and what you would look for”

- Observations to check for haemodynamic instability
- Examination of the leg after Cast Removal to look for Rash, Swelling, Colour change, Cellulitis
- Neurovascular examination: Bilaterally assess: Temperature, Lower Limb Pulses, Distal Sensation

“On examination, the patient has a Tense Right Leg that looks Pale and feels Cold. No Rash, Colour change or Swelling

Q1: What is your top differential? **Compartment Syndrome**

Q2: List another Differential? **DVT**

Investigation interpretation:

“Please interpret the following investigations” (hand them interpretation page)

- D-Dimer: Normal, Rules out DVT/ PE
- Creatine Kinase: Raised Suggests Compartment Syndrome/ Rhabdomyolysis
- U&Es: Normal, Rhabdomyolysis less likely

Q3: How would you manage Jason?

- Keep Cast off/ Remove Cast
- Keep Limb Neutral
- Fasciotomy (left open for 24-48 hours)
- Fluid Bolus
- High flow Oxygen

### **Global Impression**

- Excellent
- Good
- Pass
- Borderline
- Fail

### **Patient Impression/ Comments:**

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### **Complication in a Surgical Patient 3 – Investigations for Interpretation**

Hb (135 – 180 g/L)	143
Platelets (150 – 400 * 10 <sup>9</sup> /L)	223
WCC (4 – 11 * 10 <sup>9</sup> /L)	9
Creatine Kinase (35-250 u/l)	2300
D-Dimer (< 400 ng/ml)	200
Serum Sodium (135-145 mmol/l)	139
Serum Potassium (3.5 - 5.0 mmol/l)	4.2
Serum Urea (2 - 7 mmol/l)	5.3
Serum Creatinine (55-120 umol/l)	88