

FOUNDATION SEMINAR IN SURGERY AND PERIOPERATIVE MEDICINE

**Case Study 5: Perioperative Immunosuppressant Management**

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*Reviewed by the SHPA Surgery and Perioperative Specialty Practice Stream Leadership Committee, February 2019*

*Updated by Galahad Gu, February 2021*

**A 65 year old female presents for a left total hip replacement secondary to osteoarthritis and psoriatic arthritis. He has a 10 year history of psoriatic arthritis and a 6-7 year history of osteoarthritis. Her symptoms include stiffness and swelling after exercise, range of motion limitation with her knee giving way every few days which has resulted in falls – this is more likely after exercise or effort. She has associated arthritis in her fingers, toes, ankles, wrists and elbows and sometimes shoulders with pain, swelling and stiffness, all worse after use. She has previously been on methotrexate but this was ceased due to pulmonary fibrosis and she is currently managed on NSAIDs and antirheumatic drugs.**

Question 1: What are some of the general surgical risks of a patient with rheumatological disease?

**The patient is seen by you in the preadmission clinic. Her past medical history and available observations are as follows:**

**PMHx:**

* **R) TKR 7 years ago, complicated by wound dehiscence and limited range of motion.**
* **L) Knee arthroscopy 6 years ago, complicated by MRSA infection, multiple wash out and DVT**
* **Stress fracture L) proximal  tibial  diaphysis**
  + **Seen in Ortho OP – weight bearing as tolerated, plan for TKR**
* **Osteoporosis with associated vertebral body fractures**
* **Mid-foot fusion 10 years prior**
* **Unprovoked PE**
  + - **Multiple PEs in lung dx 2007 at routine presentation to Respiratory OP clinic**
* **Provoked DVTs**
  + - **4 episodes, all post R) TKR**
* **Respiratory disease**
  + - **Ex-smoker 10pack/year history, ceased 30 years ago**
    - **COPD, emphysema and pulmonary fibrosis**
    - **Mild COPD FEV1 >80% of expected**
    - **Frequent LRTI**
      * **3-4/year. Generally managed by GP with AB. No recent admissions secondary to LRT**
    - **All stable clinically and radiologically per respiratory outpatient clinic**
* **Hypothyroidism – on thyroxine**
* **GORD – on PPI**
* **Hypertension – on antihypertensive**
* **New systolic murmur noted in PAC- ?Mitral Regurgitation**

**Social:**

**Smoking: Ex smoker**

**Alcohol: nil**

**Living arrangements: Home alone, I ADLs**

**Work: Cook, mobilise with SPS**

**Vital signs:**

|  |  |
| --- | --- |
| **Detail** | **Value w/Units** |
| **Peripheral Pulse Rate** | **81 Beats/Minute** |
| **Respiratory Rate** | **16 br/min** |
| **Systolic Blood Pressure** | **169 mmHg** |
| **Diastolic Blood Pressure** | **82 mmHg** |
| **Mean Arterial Pressure** | **111 mmHg** |
| **Oxygen Saturation** | **96 %** |
| **Oxygen Therapy** | **Room Air** |
| **Patient Height** | **152 cm** |
| **Patient Weight** | **68.8 kg** |
| **BMI** | **29.8** |
| **Haemoglobin** | **130 g/L** |
| **Ferretin** | **25 ug/L** |
| **Creatinine** | **69 umol/L** |
| **eGFR** | **80mL/min/1.73m2** |
| **ECG** | **SR, ventricular ectopics** |

**Her medication history is as follows:**

**Allergy:**

* **tape – rash/itch**
* **aspirin/codeine – chest pain + hot sweats**

**Home medications:**

* **Etanercept 50mg subcut every Friday**
* **Telmisartan/Amlodipine 80mg/10mg mane**
* **Lansoprazole 30mg mane**
* **Leflunomide 20mg mane**
* **Sulfasalazine EN 1000mg BD**
* **Naproxen SR 1000mg mane**
* **Targin® 10mg/5mg BD**
* **Thyroxine 150microg mane**
* **Salbutamol MDI 100mcirog PRN**

Question 2: Is there any medication you would consider withholding before surgery? Why and for how long?

Question 3: Would your approach change if the patient was on methotrexate, steroids, or rituximab?

Question 4 [EXTENSION]: Is there any medication you would consider giving at this point to optimise her surgical outcome?