SimPHARM Case Summary

SimPHARM™

Case Level: Advanced Learning
Case Run: Single visit, 72 hours
Patient: James Knightley

Patient Description:

Introduction to James:

James lives alone with his dog. His wife passed away 2 years ago. He has been admitted for review of his diabetes, hypertension and chronic kidney disease.

Gender: Male

Weight: 170 lbs. / 77 kg

Height: 6' / 183 cm

Age: 77

Case Details

James has several intercurrent illnesses including a recent acute episode of cellulitis which is forming part of his current concern. He is taking warfarin long term for a heart valve replacement, he has CKD3b, type 2 diabetes, hypertension and hyperlipidaemia. He is severely allergic to penicillins and has some cross allergy to cephalosporins.

Pathologies:

Condition	Severity	Occurrence	Duration	Probability
Type 2 diabetes mellitus	-	Pre-existing	Whole case	100%
Hypertension	Mild	Pre-existing	Whole case	100%
Hyperlipidaemia	Mild	Pre-existing	Whole case	100%
Chronic kidney disease	CKD 3b	Pre-existing	Whole case	100%
Eczema	Moderate	Pre-existing	Whole case	100%
Cellulitis	Moderate	Pre-existing	Whole case	100%

Pre-existing Medication:

Betamethasone Valerate cream [for eczema]

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Cholecalciferol 1.25 mg per month

Enalapril 5 mg each morning [for hypertension]

Erythromycin 500 mg every 6 hours [for cellulitis]

Metformin 500 mg every 8 hours [for type 2 diabetes]

Simvastatin 20 mg each evening [for hyperlipidaemia]

Warfarin 5 mg each evening [for mechanical heart valve] - this has been stable dosing

Availability of drugs and laboratory investigations:

All drugs and investigations are available for students.

Debrief notes:

There is a lot going on in this case. Continued treatment with erythromycin will risk bleeding episodes with warfarin due to the drug interaction. Changing to a penicillin will almost certainly cause anaphylaxis which will be moderately severe if it occurs. A culture (initial results available to the student only) is beta-haemolytic strep which is sensitive to penicillins, cephalosporins, macrolides and vancomycin.

The key to debriefing is to get the student to concentrate on management of the cellulitis despite all of the other things happening and to be able to unpick their decision making process. This should include defining and prioritizing their proposed options as well as their risk benefit assessment of their proposed decision.

Finally, what the debrief should conclude with the students' monitoring plan and in particular with respect to the risk of bleeds and therapeutic failure attached to the anticoagulant.