1. Antidepressant in acute renal failure

You are on a ward round with a consultant. Your next patient is a man with diabetes, who also has acute renal failure following ketoacidosis. The consultant would like to prescribe an antidepressant. Which one would you recommend?

Suggested questions to ask include:

(a) Which antidepressant did you have in mind?
It is helpful to know if the consultant has a preference for a particular drug or group of drugs. There is no point advising him of a good choice for renal reasons that is not clinically suitable for the patient. For example the consultant may already have unsuccessfully prescribed a particular drug to this patient in the past.
(b) What is the extent of the renal failure?
(c) How long is it expected to last?
(d) Is the patient subject to any renal replacement therapy?
For an acute renal problem it may be best to wait until the impairment has resolved before starting certain medicines. If waiting is not appropriate, then you will need some idea of the extent of kidney impairment in order to advise on choice of drug, initial dose, and any change in dose once impairment improves. Any RRT may further influence dose and choice.
(e) Is the patient taking any other medication?
(f) Does the patient have any other significant medical problems?
You always need to check for potential interactions, cautions and contraindications when advising on choice of therapy.

Suggested Sources:

- BNF, SPCs, Maudsley Guide, Psychotropic Drug Directory (Bazire), Medicines Q&As

2. Tuberculosis in renal failure

A hospital physician bleeps you. He has a 9 stone, 76-year-old lady with a creatinine of 300 micromol/L. She is suspected of having tuberculosis and he would normally prescribe rifampicin, pyrazinamide, isoniazid and ethambutol for this according to the BNF regimen. Should any of these drugs be given in reduced dose in this case?

Suggested questions to ask include:

(a) What is the exact regimen?
For example, is it a daily regimen or a three times weekly one? What doses would normally be prescribed?
(b) Is the renal function stable? Is it an acute or chronic problem?
If it is deteriorating or improving, then further dose adjustments may be needed later.
(c) Is any RRT involved?
If so, you'll need the details.
(d) Is the patient taking any other medication?
Some drugs may interact with medicines for TB. It's also worth asking about this in order to check that other drugs that might accumulate in renal impairment have had appropriate dose reduction.

Suggested Sources:

- BNF, Renal Drug Handbook, SPCs and Stockley for interactions, BTS guidelines for TB.

3. Fluconazole in a patient on dialysis

An ITU nurse calls at the dispensary to collect some fluconazole. She has a patient on dialysis who needs this drug. She asks if it's just the normal dose.

Suggested questions to ask include:

(a) What is the indication for the fluconazole?
This will affect the dose required and the likely duration of therapy.
(b) Is parenteral administration needed?
This may be obvious after you have received the answer to (a) above.
(c) What does she mean by dialysis?
What form of RRT is being used here? If it is haemodialysis, how often is it being performed? This will affect the timing of doses.
(d) What other medication is the patient taking?
You'll need to check out any potential interactions.
(e) Does the patient have any other significant medical problems?
To check that fluconazole is suitable for this patient.

Suggested Sources:

- SPC, Renal Drug Database, Stockley for interactions, Embase or Medline search.