

Notes for Med student educational day

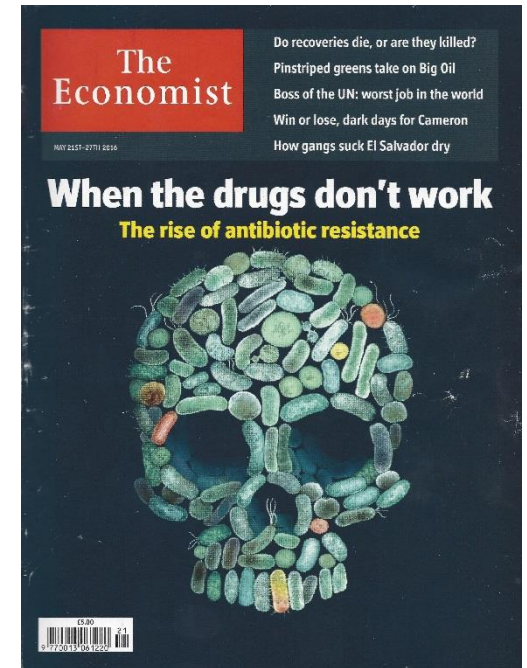
19 August 2016

Order

- Quiz (5mins)
- Importance of recognition of sepsis
 - Any setting (primary, secondary, tertiary care; all specialties)
- Sepsis 6
 - Give high flow oxygen
 - Take blood cultures and try to identify source (control)
 - Give IV antibiotics (no delays)
 - Give IV fluids
 - Check lactate (healthy pts drop like a stone)
 - Monitor urine output
- Use of antibiotics: tension between treating pt and safeguarding antibiotics for future

Antibiotics the rise of resistance

- Epidemiology
 - Economist front cover – is it an exaggeration?
 - CPEs across Europe – rising trend
 - CPEs in England – rising trend
- Situations
 - Use of antibiotics as surgical prophylaxis – eg TURP (locally 20% Cipro resistance)
 - Difficulties with treating patients – rise of OPAT
- Will need personalised medicine – treatment based on own isolate
- Huge need for infection specialists



Types of infection specialists

- Ward-based infection consults
 - Routine (eg ITU)
 - Prompted by results (eg BLCs)
 - Prompted by calls
- Infection clinics
 - OPAT
 - Returning traveller
 - Complex cases
- In-patient care (ID accreditation needed)
- Subspecialists
 - Tropical
 - Virology
 - Individual clinical areas
 - Lab service
 - Infection control

Lab service

- Microbiology and virology increasingly becoming integrated
 - Based on PCR and genome work (eg Menlon)
- Centralised labs (therefore very few opportunities for those wanting a lab-based career)
 - Working at a distance is frustrating and inefficient (negative)
 - Increases focus on clinical work (positive)

Day in the life

- My work pattern
- 1:2 clinical first-line
- On clinical, morning projects, lab management, result review
- Afternoon ward rounds triggered by emailed consult requests / results
- Off clinical, IPC, projects, guidelines
- Example (outbreak)

Virology

- Fast advancing
- New and re-emerging viruses
- New diagnostics
- New antivirals
- New vaccines

Future vision

- Extensive POCT using personalised sequencing
- How to interpret data
- Less lab need
- More clinical need
- Resistance means that personalised medicine comes in