



Quality and
Patient Safety
Directorate

Tús Áite do
Shábháilteacht 1 Othar
Patient Safety 1 First



ROYAL COLLEGE OF
PHYSICIANS OF IRELAND



Office of the
Nursing & Midwifery
Services Director

HALT 2016 TRAINING DAY: CASE STUDIES

Lecture 4: Case Studies 1 to 5

Case Study 1: G. Gertrude

- G. Gertrude is a 93 year-old female (born in 1923), who has been living full time in the LTCF for over a year
- She is in her bed at 8am on the survey day (4th May)
- Her resident study number is A03
- She is generally well, with no hospital admissions since she has been in the LTCF
- She requires a wheelchair
- She has no urinary catheter/no vascular catheter/ no pressure sores / no wounds
- She is fully orientated and continent
- Three days ago she complained of pain on urination. She was otherwise well and had no temperature
- On 1st May, her in-house GP started her on oral ciprofloxacin 250mg twice daily (BD) for five days
- Dipstick test on urine showed positive result for nitrites and leucocytes
- A mid-stream urine sample (MSU) was sent to laboratory for culture and sensitivities three days previously
- On day of the survey (4th May), G. Gertrude is feeling much better. The MSU results showed $>10^5$ cfu/ml *E. coli*, reported as ESBL-positive, cefotaxime resistant and meropenem susceptible/sensitive

Case Study 2: R. Romeo

- R. Romeo is a 79 year-old male (born in 1937), who has been a full-time resident in the LTCF for two years
- He is present at 8am on the survey day
- His resident study number is A04
- He has general poor health, disorientated, bedridden, and incontinent (urinary)
- He has no urinary catheter/no vascular catheter/ no pressure sores / no wounds
- He was admitted to hospital electively 30 days ago for a prostatectomy
- On day of the survey (8th May) his medical notes indicate that he had passed blood in his urine in the last 24 hours and his temperature is 37.9°C
- On 7th May, the LTCF medical officer prescribed oral trimethoprim 200mg twice daily (BD) for seven days
- Laboratory results on the mid-stream urine sample (MSU) were not available on 8th May

Case Study 3: P. Polonius

- P. Polonius is an 92 year-old male (born in 1924), who has been living in the LTCF for past three years
- He is bedridden but continent
- He was admitted to hospital two weeks previously for cholecystectomy, from which he has recovered well and he returned to your LTCF yesterday (7th May)
- He has no history of heart or breathing problems
- He has a urinary catheter
- His surgical wound is healing well
- He does not have a vascular catheter or pressure sores and is fully orientated
- On the day of the survey (8th May), P. Polonius is in the LTCF at 8am and his resident study number is A10
- He has a cough that was not present the day before and an O₂ saturation of 92%
- His temperature on the day is 38.3°C
- He is not on any antimicrobials – the GP is due to review him later that day and he has not yet produced any sputum to send to the laboratory for culture

Case Study 4: H. Horatio

- H. Horatio is a 59 year-old male (born in 1957), who has been living in the LTCF for the last 25 days
- His resident study number is A08
- He was transferred to the LTCF from an acute hospital following surgery as a result of a road traffic accident
- Due to a spinal injury, he currently requires a wheelchair and has a suprapubic catheter
- He underwent surgery two months previously and the surgical wound is fully healed and he has a pressure sore at the base of his spine
- On the survey day (8th May), he is present at 8am and is complaining of a dry cough, stuffy nose and sore throat. He tells you that he has had these symptoms for the last two days
- He has no vascular catheters *in situ*
- He is prescribed no antimicrobials
- His temperature is normal and he is fully orientated and incontinent of faeces
- No specimen has been sent to the laboratory

Case Study 5: M. Macbeth

- M. Macbeth is an 83 year-old male (born in 1943), who has been living in the LTCF for the last two years
- He uses a wheelchair and requires oxygen at night for emphysema, for which he also regularly uses an albuterol inhaler
- He has returned to the LTCF at lunchtime on May 8th, following a week-long home visit with family
- His resident study number is A12
- During this visit he had a suspected respiratory tract infection and the local GP prescribed po amoxicillin four days ago
- On the day of the survey (May 8th) he has:
 - No pressure sores or wounds
 - No vascular or urinary catheters and is fully continent
 - Had no recent admissions to hospital
 - A normal temperature, is fully orientated and on his last day of antimicrobial treatment

Lecture 5: Case Studies 6 to 9

Case Study 6: R. Rosalind

- R. Rosalind is a 95 year-old female (born in 1921), who has been living in the residential care setting full-time for less than a year
- She is present at 8am on the survey day and her resident study number is A02
- She is very debilitated, doubly incontinent, bedridden and disorientated
- She has a sacral pressure sore
- She has no urinary catheter/no vascular catheter/ no wounds
- Her last hospital admission was eight months ago
- On the day of the survey (8th May), she has oedema of her lower right leg, which is also hot to touch, red and tender. The symptoms started 7th May and R. Rosalind's GP had prescribed fusidic acid cream for twice-daily application for seven days
- A leg swab was taken but the result isn't back yet from the lab

Case Study 7: J Juliet

- J. Juliet is an 84 year-old female (born in 1932), who has been living full time in the LTCF for two years, after being unable to live on her own due to the onset of dementia
- She had a stroke 20 years ago but made a full recovery with no lasting effects
- She is present at 8am on the survey day and her resident study number is A05
- She also has high blood pressure (which she is on medication for) and a mobility problem (due to a hip replacement two years ago) for which she has a walking aid
- She has a history of recurrent urinary tract infections
- She has no urinary catheter/no vascular catheter/ no pressure sores / no wounds
- She is disorientated due to her dementia, but fully continent
- She has had no hospital admissions in previous six months
- Her medication regimen, as prescribed by her geriatrician at her last visit to clinic six months ago, is as follows: bendroflumethiazide 2.5 mg once daily (morning), donepezil hydrochloride 10 mg once daily, oral trimethoprim 100 mg once daily

- On the day of the survey (8th May), staff have not noticed any changes in her condition for at least the last two weeks and there has been no urine dipstick or MSU sent in that time
- She has no dysuria, no fever, no leucocytosis and no new or increased frequency, urgency, haematuria, or suprapubic pain

Case Study 8: O. Ophelia

- O. Ophelia is an 80 year-old female resident (born in 1936), who has been a full-time resident in the long-term care facility for 10 years
- Present at 8am on the survey day and her resident study number is A01
- She can walk alone without assistance
- She has not been admitted to hospital in the last year
- She has no urinary catheter/no vascular catheter/ no pressure sores / no wounds
- She is fully orientated and continent
- She is on no medication on the day of the survey
- She has had watery stools for the past three days, with four episodes of watery stools in the last 24 hours and a stool sample was sent to the microbiology laboratory yesterday
- She has no vomiting or blood/mucus in the stools and her temperature is within the normal range
- She has no past history of diarrhoea
- She has a penicillin allergy and recently completed a seven day course of levofloxacin prescribed by her GP for a chest infection two weeks previously
- On the survey day (8th May) the culture results and *C. difficile* toxin test on the stool sample are not yet available

Case Study 9: R. Rosencrantz

- R. Rosencrantz is a 66 year-old male (born in 1950), with early onset dementia, who has been living full-time in the LTCF for the last five years
- He is in his bed at 8am on the survey day and his resident study number is A07
- He is physically well but disoriented to the reality of the world around him
 - He has no idea of staff names, current affairs, the country he lives in or the day/month/year he is living in
 - However, he can find his way unattended to the dining room for meals, and knows which drawer in the nurses office cigarettes are stored in
- He has had no hospital admissions since arriving in the LTCF
- Over the last two days he has been urinating more often
- He has no urinary catheter/no vascular catheter/ no pressure sores / no wounds and is fully continent
- His temperature was taken on the morning of the survey (8th May) and his highest recorded temperature has been 37.6°C
- No urine sample has been sent for laboratory analysis, nor has a dipstick test been carried out
- He's not currently prescribed any antimicrobials

Extra Case Studies for Homework

Case Study 10: S. Shylock

- S. Shylock is a 75 year-old male (born in 1941), who was discharged from hospital, following right total knee replacement surgery three weeks previously
- He was transferred to the LTCF on the evening of May 6th
- He is currently using a walking aid but is otherwise in general good health
- On the day of the survey (May 8th) his resident study number is A13
- His right knee wound developed redness at the superior edge along with purulent discharge the evening before (May 7th) and the wound edge looks more swollen today according to the staff nurse
- The GP started oral flucloxacillin for seven day course this morning
- A swab had been taken from the right knee wound when he arrived in the facility and the laboratory report has arrived in the post today with 'No growth' on the report
- He has:
 - No pressure sores
 - No vascular or urinary catheters
 - A normal temperature
 - He is fully orientated
 - He is fully continent

Case Study 11: D. Desdemona

- D. Desdemona is an 86 year-old female (born in 1930), who has been living in the LTCF for seven years with a recent history of hospital admission, having been discharged from hospital on May 3rd following a three week admission for investigation of anaemia during which she had an OGD and colonoscopy
- Her discharge medications included oral co-amoxiclav which is due to finish 8th May and the discharge letter states the reason it was started was for treatment of hospital acquired pneumonia. There is no mention of any positive microbiology results while in hospital on the discharge letter
- She is bedridden and has a pressure sore on her hip and no other wounds

- She has a long-term urinary catheter and no vascular catheters
- She has a normal temperature, is fully orientated and continent
- On the day of the survey (May 8th) she is feeling well and her appetite is good. Her resident study number is A14

Case Study 12: B. Bianca

- B. Bianca is a 73 year-old female (born in 1943), who has been living full-time in the LTCF for past five years
- She suffers with dementia and has recently lost the ability to swallow food. As a result, she had a PEG tube inserted two weeks previously, following a day case procedure in a local hospital endoscopy department
- She is disorientated and incontinent and uses a walking aid
- She is present at 8am on the day of the survey (8th May) and her resident study number is A11
- She has no urinary catheter/no vascular catheter/ no pressure sores
- On the day of the survey a yellow exudate has been noted at the PEG tube site and she has a temperature of 37.9°C
- She has been spiking temperatures up to 37.9°C for the last 48 hours, although she is otherwise very well – her blood pressure is within normal limits – A set of blood cultures were taken on 6th May
- The microbiology laboratory results on a pus sample sent from the PEG site for culture and sensitivity testing are not yet available
- You arrive on the ward to do the HALT survey and the nurse tells you she has just received a call from the microbiologist in the hospital - The blood culture sample taken on 6th May “flagged” positive, with Gram-positive cocci found on Gram stain and the blood culture result shows MRSA. No further culture results are available yet. The microbiologist advised to repeat the blood cultures and to commence IV vancomycin for at least 14 days. The medical officer has been bleeped to come and prescribe the vancomycin and to repeat the blood cultures