

SCE ANSWERS
BGS TRAINEES WEEKEND CARDIFF 22ND JAN 2017

1. E
2. E
3. A
4. D
5. C
6. B
7. B
8. C
9. E
10. C
11. A
12. A
13. A
14. B
15. D
16. C
17. A
18. C
19. A
20. D
21. C
22. E
23. B
24. D
25. A
26. D
27. E
28. A
29. A
30. D
31. E
32. D
33. D
34. B
35. D
36. B
37. B
38. C
39. A
40. E
41. A
42. B
43. A
44. E
45. B
46. C
47. A
48. B
49. A
50. C

Extra answers

7. The POVA process should aim to establish all the facts, including that his daughter does indeed hold an LPOA. It should also prompt subsequent safeguarding measures for the patient whilst she is on the ward including managing subsequent meals and visits. It may also lead to a separate assessment of her husband and establish his diagnoses/needs. Some/All of the other answers might subsequently be relevant but under the umbrella of the POVA process.
8. The key issue is whether or not this lady has mental capacity on the decision to leave the A/E department and go home. The first step of her mental capacity assessment on this decision is to establish whether or not she is cognitively impaired.
9. Linda Fried identified the frailty phenotype and it is defined as having three or more of the following five criteria: unintentional weight loss, exhaustion, muscle weakness, slowness while walking and low levels of activity. Frailty in older adults: evidence for a phenotype. LP Fried J Gerontol A Biol Sci Med Sci 2001. And for a comprehensive review of frailty including the other commonly used definition, the deficit model, please see Frailty in Older People, Clegg A, The Lancet Volume 381 No. 9868, p752-762 2 March 2013
11. The Acute HF Quality standard (National HF Audit 2014) 4 and 5 stated that all HF patients with HFrEF should be given these 3 disease modifying medications. The National HF Audit 2014/15 data, albeit observational data, showed patients taking all 3 disease modifying medications had better prognostic outlooks than those who did not manage to take all 3 drugs, worse is the group who were not taking any of the 3 drugs. The study EMPHASIS HF recruited only patients with EF<35%, therefore ESC guideline 2012 only recommended patient with EF<35% should be given MRA. ESC 2016 guideline changed the definition of HFrEF (heart failure with reduced EF) being <40%. Therefore this patient should be given MRA, before discharge if possible. Asthma is contraindicated, not COPD. Cautions should be taken as some COPD patients also have an "asthma" element. PARADIGM HF study showed Sacubitril/ Valsartan is superior than ACEi in the mortality and hospitalisation endpoints. It already has NICE approval and European licence. We will soon use this drug instead of ACEi. But not in acute setting as in this case. But this may change. Device therapy is only considered when EF< 35%. In any case, patient should be stable on HF drugs for 3-6 months, then echo should be repeated before considering device therapy. There is no age limits for device therapy.
12. Gutter frames have forearm troughs or 'gutters' that allow weight-bearing through the forearm in patients who are unable to use the wrist or hand.
13. Botulinum toxin works by preventing release of acetylcholine from motor nerve terminals
14. Faecal calprotectin (FC) is a calcium-binding heterodimer, which is abundant in the cytoplasm of neutrophils. Inflammation causes neutrophil activation, which results in calprotectin release proportionate to the degree of inflammation. Gastrointestinal inflammation, as in active inflammatory bowel disease (IBD), releases calprotectin into body fluids including faeces. FC remains stable in faeces for up to 5 days and its use as a non-invasive biomarker in IBD management is gaining popularity. As calprotectin release is proportionate to the degree of inflammation, it may also have a role in monitoring disease activity. FC testing which is non-invasive, can guide clinicians in managing patients with inflammatory bowel disease.

16. Resite NG and use mittens. Although clearly needs to be a best interests decision, she agreed to NG when she had capacity, and nothing has changed apart from the delirium (ie no new stroke to change prognosis). Bridle alone would be unwise as likely to pull it out; same goes for PEG.)

17. People with MCI do not need to inform DVLA unless they or others have concerns about safety. (People diagnosed with dementia have a legal obligation to inform DVLA).

18. Neuroleptics like risperidone should not be considered unless agitation is so severe it is putting patient at risk (or putting others at risk). Reducing dose or changing time of donepezil dosing, or changing to rivastigmine, is unlikely to reduce BPSD (and may worsen it).

20. Frailty score. The rest are part of the standard Waterlow assessment.

21. Peripheral vascular disease, which carries a 5 point value. The others are all worth 3 points.

22. CG179: Encourage adults who have been assessed as being at risk of developing a pressure ulcer to change their position frequently and at least every 6 hours.

23. Urine culture should only be requested when signs of infection are present (e.g. rigors, fever, delirium, sepsis, etc.), not because the appearance or smell of the urine suggests infection. In this case, the urine culture should not have been requested in the first instance, so no action is required other than to observe the patient.

The urine culture result is likely to represent asymptomatic bacteriuria and antibiotic treatment is not indicated in the absence of signs of infection. Indeed, inappropriate use of antibiotics may lead to antibiotic resistant strains (making future infections more difficult to manage) and can increase the risk of *Clostridium difficile*.

Replacing the urinary catheter requires further instrumentation of the urinary tract and is not without its risks. Also, there is no evidence that replacing a urinary catheter provides benefit in asymptomatic bacteriuria.

The urinary catheter should be removed at the earliest opportunity if it is clinically appropriate. However, we are not provided with the reason for urinary catheterisation in this case. Removing the catheter based purely on the urine culture result is inappropriate.

[SIGN guidelines on Suspected Bacterial Urinary Tract Infection in Adults]

24. NICE advises that all patients aged 65 years or older should be regarded as being at risk of falling in hospital. NICE advises against the use of fall risk prediction tools to predict inpatients' risk of falling in hospital.

As part of a multifactorial assessment, NICE recommends the following for patients at risk of falling in hospital:

"Ensure that any multifactorial assessment identifies the patient's individual risk factors for falling in hospital that can be treated, improved or managed during their expected stay. These may include:

- Cognitive impairment
- Continence problems
- Falls history, including causes and consequences (such as injury and fear of falling)
- Footwear that is unsuitable or missing
- Health problems that may increase their risk of falling

- Medication
- Postural instability, mobility problems and/or balance problems
- Syncope syndrome
- Visual impairment

[NICE]

25. In **hospital outpatient settings**, the PRISMA-7 questionnaire is one of the tools recommended to screen for frailty by NICE and the BGS. It includes the following questions:

- Are you more than 85 years?
- Male?
- In general, do you have any health problems that require you to limit your activities?
- Do you need someone to help you on a regular basis?
- In general, do you have any health problems that require you to stay at home?
- In case of need, can you count on someone close to you?
- Do you regularly use a stick, walker or wheelchair to get about?

The other tools recommended by NICE and the BGS include gait speed (taking more than 5 second to cover 4 metres) and the "Timed up-and-go Test" (TUGT) – i.e. taking more than 10 seconds to get up from a chair, walk 3 meters, turn around and sit down.

NICE also recommends "self-reported health status" and use of the "Physical Activity Scale for the Elderly".

[NICE / BGS]

26. It would be inappropriate to prescribe calcium supplements or bisphosphonates without first assessing fracture risk.

NICE advises to consider assessment of fracture risk in all women aged 65 years and over and all men aged 75 years and over. Both QFracture and FRAX are recommended depending on the patient age and whether BMD values are known or not.

QFracture is suitable for patients aged between 30 and 84 years of age. BMD values cannot be incorporated into the risk algorithm.

FRAX is suitable for people aged between 40 and 90 years, either with or without BMD values.

It would also be advisable to consider checking the patient's vitamin D level:

"Health professionals should not routinely test people's vitamin D status unless

- they have symptoms of deficiency,
- they are at particularly high risk of deficiency (e.g. they have very low exposure to sunlight)
- there is a clinical reason to do so (e.g. they have osteomalacia or **have had a fall**).

[NICE – fragility fracture risk assessment and vitamin D supplementation]

27. NICE lists glucosamine, chondroitin and acupuncture as interventions that should not be offered in the management of OA. Others include rubefacients and intra-articular hyaluronan injections.

Interventions that NICE recommends include:

- Local muscle strengthening
- General aerobic fitness

- Weight loss in those who are obese or overweight
- Thermotherapy (the use of local heat or cold) – should be considered as an adjunct to core treatments
- Electrotherapy (TENS should be considered as an adjunct to core treatments for pain relief)
- Aids and devices (e.g. bracing/joint supports/insoles/walking sticks/tap turners)
- Manual therapy – manipulation and stretching should be considered as an adjunct to core treatments, particularly for OA of the hip
- Paracetamol (as required or regularly)
- Topical NSAIDs (particularly in knee or hand OA)
- Topical capsaicin – should be considered as an adjunct to core treatments for knee and hand OA
- Intra-articular corticosteroid injections
- Surgical options (only once non-surgical interventions have been explored)

NICE states the following:

“If paracetamol or topical NSAIDs are insufficient for pain relief for people with osteoarthritis, then the addition of opioid analgesics should be considered. Risks and benefits should be considered, particularly in older people.”

This implies that oral NSAIDs / COX-2 inhibitors should be avoided wherever possible in the management of OA. When they must be used, they should be used “at the lowest effective dose for the shortest possible time-period”.

[NICE]

28. There are 3 clinical subtypes of delirium: hyperactive, hypoactive and mixed. Hypoactive delirium is less likely to be recognised despite patients having a more severe illness.

Verbal aggression, wandering and visual hallucinations tend to be associated with hyperactive delirium.

Carphologia is a lint-picking behaviour that is often a symptom of a delirious state. It describes the actions of picking or grasping at imaginary objects, as well as the patient’s own clothes or bed linen. It can be a symptom of extreme exhaustion or approaching death. It can be seen in both hypoactive and hyperactive delirium.

Reduction of appetite is associated with hypoactive delirium, as are the following:

- Reduced concentration
- Slow responses
- Reduced movement / reduced mobility
- Withdrawal

[NICE] [Young J, Inouye S. Delirium in older people. BMJ, April 2007]

29. UK Parkinson’s Disease Society Brain Bank Clinical Diagnostic Criteria

30. NICE recommends using ¹²³I-FP-CIT-SPECT in patients where essential tremor cannot be clinically differentiated from parkinsonism. However, the tremor could be due to thyrotoxicosis and exclusion of this would be sensible before considering SPECT.

[NICE]

31. There is currently no known effective treatment for slowing progression in idiopathic Parkinson’s disease.

[NICE]

32. All the answers provided are tools used to predict pressure ulcer risk, except the PUSH tool which is used to monitor the change in established pressure ulcers over time.

[NICE, National Pressure Ulcer Advisory Panel (NPUAP)]

33. CHA2DS2-VASc – Friberg et al. Eur Heart J 2012 Jun;33(12):1500-10