

The MCQ paper: sample questions and answers

The following 10 questions are all taken from the same recent (1989) MCQ paper. The answers follow each question.

1. *The signs and symptoms of parkinsonism:*

- (a) characteristically remain unilateral for years
- (b) are a recognized side-effect of amitriptyline therapy
- (c) are a recognized sequel to encephalitis
- (d) characteristically include intention tremor
- (e) are exacerbated by levodopa and carbidopa given in combination.

(Medicine) The original reference was to Russell Brain's (1977) *Diseases of the Nervous System* (8th ed, Oxford University Press). The question had been run four times and had always performed well on statistics.

A – false: It would be very unusual for any of the degenerative processes causing parkinsonism to affect only one hemisphere over several years. If they did, this would cast doubt on the original diagnosis; i.e. it would not be a 'characteristic' feature.

B – false: Phenothiazines are 'recognized' to cause parkinsonian features but not tricyclic antidepressants.

C – true: The easiest item with 90% getting the correct answer, but with a strong correlation coefficient of 0.33 indicating that the poor candidates were getting it wrong or not attempting it.

D – false: Intention tremor is characteristic of cerebellar disease.

E – false: A surprising 17.4% did not realize that levodopa and carbidopa = Sinemet.

2. *Hypokalaemia is a recognized complication of:*

- (a) cortisone therapy
- (b) digoxin therapy
- (c) aldosterone antagonists
- (d) carbenoxolone therapy
- (e) excessive purgation.

(Therapeutics) No original reference was quoted, but the answers can be worked out from general principles. Hypokalaemia is often a puzzling finding when an elderly patient is investigated.

A – true: Corticosteroids cause retention of sodium and hypernatraemia, e.g. Cushing's disease.

B – false: Hypokalaemia is dangerous in someone taking digoxin, but digoxin does not lower potassium.

C – false: Spironolactone is frequently given because thiazide diuretics have led to hypokalaemia.

D – true: Carbenoxolone causes sodium retention and may be associated with a lowered serum potassium.

E – true: Possibly a bit too easy.

3. *In female adolescence:*

- (a) initial menstruation is typically anovulatory
- (b) haematocolpos is a recognized cause of secondary amenorrhoea
- (c) breast development typically begins after menarche
- (d) dilation of the cervix is the treatment choice for severe dysmenorrhoea
- (e) most girls seeking contraceptive advice are not yet sexually active.

(Obstetrics/Gynaecology) The question was first used in 1977 and the original reference was to an article in the *British Medical Journal* (1, 98–9) by J A Jordan. A more recent reference would be to McPherson and Anderson's *Women's Problems in General Practice* (1983, Oxford University Press). The whole question is rather too easy and items C and D were both answered correctly by 95% of the candidates.

A – true: The only quibble might be over the use of the word 'typically' which is used in the examination to mean a feature whose presence would be expected. McPherson uses the word 'usually'.

B – false: A test of knowledge or terminology.

C – false

D – false: It is difficult to believe any gynaecologist has done this since the 1960s.

E – false: A necessary piece of knowledge for all general practitioners wanting to defy the likes of Mrs Gillick.

4. *In acute epiglottitis:*

- (a) **haemophilus influenzae is the usual cause**
- (b) **most patients are under 6 months of age**
- (c) **onset is typically insidious**
- (d) **the child characteristically lies supine with knees drawn up**
- (e) **drooling is a typical sign.**

(Paediatrics) Acute epiglottitis has never been seen by most general practitioners but it is sufficiently important to justify a whole question. A fairly recent reference is G W Hickish – *Ear, Nose and Throat Disorders* (1985, Edinburgh, Churchill Livingstone) p. 200 ff.

A – true: It is important for general practitioners to know that haemophilus is frequently resistant to ampicillin-type drugs, even if it will be the hospital who set up the intravenous antibiotics.

B – false: They are usually aged 2–4.

C – false: “A fit child may be in dire distress within six hours.”

D – false: The tripod position with the child sitting up with arms and head back is characteristic.

E – true: The child cannot swallow.

5. *Alcohol:*

- (a) **dependent patients characteristically develop delirium tremens within 12 hours of withdrawal.**
- (b) **dependence is associated with an increased risk of pulmonary tuberculosis.**
- (c) **induced liver damage is more likely in women than men at an intake of 60 gms per day (ie. 200 ml of a 70% proof spirit).**
- (d) **consumption per capita remains steady year by year in the United Kingdom.**
- (e) **abuse is more prevalent amongst doctors than in the general population.**

(Psychiatry) The original reference is to two articles in the *Lancet* of 1978; but all the answers can be found in *Medicine International* No. 62, February 1989, Alcohol and Drug Misuse.

A – false: Within 3 days. Most alcoholics can sleep off the effect of a binge for 12 hours before getting major withdrawal effects.

B – false: Rather an old-fashioned item, but down and out alcoholics, even if most general practitioners do not see them, remain a source of pulmonary tuberculosis.

C – true: The numbers are all intended to confuse. Women are more liable to liver damage at almost any given level of alcohol intake.

D – false: Consumption of alcohol doubled in the UK between 1949 and 1979, although it has fallen a bit since then.

E – true: Increasingly less true, although we thought **all** doctors knew this.

6. *Acute appendicitis:*

- (a) **is typically associated with a low dietary fibre intake.**
- (b) **in the elderly is recognized to present with intestinal obstruction.**
- (c) **is a recognized cause of microscopic haematuria.**
- (d) **can present as diarrhoea and vomiting in infants.**
- (e) **is an unlikely diagnosis if the patient's temperature is less than 39°C.**

(Surgical diagnosis) The original reference was an article by Harold Ellis in *Medicine* (1981, 12, 555). The MCQ group were not completely happy with this question, although the statistics were very satisfactory.

A – true: We are dubious about the truth of this statement. It used to be an article of faith among surgeons that appendicitis was a disease of civilization and that it was caused by a highly refined diet. It is also probable that the prevalence of acute appendicitis has decreased with an increase in fibre in the UK diet.

B – true: Certainly, but does a general practitioner need to know this?

C – true: This is important. Appendicitis can be confused with UTI.

D – true: This must be true, almost everything ‘can’ present as diarrhoea and vomiting in an infant. We would avoid the use of the ambiguous word ‘can’ now.

E – false: We do not like to use the word ‘unlikely’ which is too vague. Appendicitis is ‘typically’ associated with a temperature of below 39°C.

7. *In patients with presbycusis (hearing loss due to ageing):*

- (a) recruitment is typically present.
- (b) characteristically male voices are heard more easily than female voices.
- (c) high fibre diets have been shown to delay the progress of the condition.
- (d) high environmental noise levels do not influence the rate of progress of the condition.
- (e) hearing by bone conduction is unaffected.

(ENT) The original reference was to an article by M A Too-Chung (1978, *Update*, 16, 271–81), on “Deafness in the adult”.

A – true: In presbycusis the outer hair cells of the cochlea degenerate, and the patient cannot hear quiet sounds, but suddenly becomes aware of noise as volume increases. Recruitment is the reason an elderly patient may object to a doctor talking to him/her loudly.

B – true: Higher frequencies go first.

C – false: Only 0.8% got this wrong, but 23.1% failed to answer; they should have backed their almost certainly correct guess that the item was false.

D – false: Presbycusis is more common earlier in urban populations, and is strongly related to occupations which are noisy.

E – false: The middle ear may be normal but hearing a tuning fork on the mastoid is still affected as the cochlea is damaged.

8. *Acne rosacea:*

- (a) Keratitis is a recognized feature.
- (b) the facial rash has features in common with that of lupus erythematosus.
- (c) oral tetracycline is beneficial.
- (d) rhinophyma is a late sequel.
- (e) comedones are characteristic.

(Dermatology) No reference is given, but most of the answers are given in *Medicine International*, No. 50, February 1988; *Dermatology Part 2*. Most dermatologists now dislike the term ‘acne rosacea’ and prefer to call it ‘rosacea’.

A – true: A frequent cause of presentation in general practice.

B – true: They both affect the centre of the face and make it red.

C – true: This is the cheapest treatment.

D – true: If rosacea is treated satisfactorily by a general practitioner, this may be prevented.

E – false: One of the differentiating features from acne vulgaris in middle age.

9. *Mobility allowance:*

- (a) is available only to those who hold a current driving licence.
- (b) can be claimed by a handicapped child of 3 years.
- (c) can be paid only until the age of 75 years.
- (d) is available for periods of short-term disability lasting less than 1 year.
- (e) is automatically available to those on the Blind Register.

(Ethical/legal) The reference is DoH leaflet NI 211 ‘Mobility Allowance’. Approximately 7% of candidates did not attempt any part of this question. Knowledge, even at the most basic level, about social benefits is regrettably poor in MRCGP candidates.

A – false: The allowance is intended to help with transport costs and is for those virtually unable to walk.

B – false: It can only be claimed for those aged 5–65, but once obtained it is paid until the claimant reaches 75 – when it stops.

C – true: See above.

D – false: “You must be likely to remain unable, or virtually unable, to walk for at least a year.”

E – false: 53.4% did not attempt this; 15% got it wrong. Mobility Allowance is for those who are unable to walk.

10. *Under the Misuse of Drugs Act 1971:*

- (a) a pharmacist dispensing a specified drug may be required to supply the name and address of the prescribing doctor.
- (b) a prescription for a controlled drug must contain the patient’s name and address in the doctor’s own handwriting.
- (c) doctors must keep a register of controlled drug transactions in a bound book.
- (d) a locked car is regarded as a locked receptacle for the safe custody of controlled drugs.
- (e) any doctor attending a person he suspects is addicted to a controlled drug must inform the appropriate authority within 7 days.

(Practice organization) Considering the importance to practising general practitioners, this question was not very well answered. The Guide to the Misuse of Drugs Act 1971, issued in December 1989, gives full details. The reference quoted is the *British National Formulary* (1990) pages 8–9.

A – true: Regulation 25 gives a list of authorized persons who can demand from a pharmacist names and addresses of doctors who have prescribed certain drugs. Details must be kept for up to 2 years.

B – true: Over 10% of candidates did not know this, which was somewhat alarming.

C – true: It must be *bound*, not loose leaf.

D – false: Over 12% did not know this.

E – true: 30% did not know this.