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SELF-ASSESSMENT QUESTIONNAIRE

Rheumatological & immunological disorders

Twenty self-assessment questions (SAQs) based on the published articles will appear at the end of each CME specialty featured in *Clinical Medicine*. The questions have been validated for the purpose of CME by independent experts. Three (3) CME credits will be awarded to those achieving 80% correct answers. This opportunity is open only to RCP Fellows and Collegiate Members in the UK who are registered for CME*.

A loose leaf answer sheet is enclosed, which will be marked electronically at the Royal College of Physicians. **Answer sheets must be returned by 21 May 2001** to:

CME Department (SAQs),
Royal College of Physicians,
11 St Andrews Place,
London NW1 4LE.

Correct answers will be published in the next issue of *Clinical Medicine*.

* Further details on CME are available from the CME department at the Royal College of Physicians (address above or telephone 020 7935 1174 extension 306 or 309).

Guidelines on completing the answer sheet

Your completed answer sheet will be scanned to enable a quick and accurate analysis of results. To aid this process, please keep the following in mind:

1 Please print your GMC Number firmly and neatly
2 Only write in allocated areas on the form
3 Only use pens with black or dark blue ink
4 For optimum accuracy, ensure printed numbers avoid contact with box edges
5 Please shade circles like this: ● Not like this: ✓
6 Please mark any mistakes made like this: ✗
7 Please do not mark any of the black squares on the corners of each page
8 Please fill in your full name and address on the back of the answer sheet in the space provided; this will be used to mail the form back to you after marking.

Q1 Cytoplasmic anti-neutrophil antibodies (c-ANCA) in vasculitis:

a) Are a sensitive marker for Wegener's
b) Are directed against myeloperoxidase (MPO)
c) In a rising titre always indicates a need to increase immunosuppressive therapy
d) Are found in >75% of classical PAN patients
e) Have a role in endothelial cell activation

Q2 In the treatment of systemic vasculitis:

a) Cyclophosphamide should be maintained for at least one year after remission induction
b) The risk of haemorrhagic cystitis increases with the cumulative dose of cyclophosphamide received
c) Eradication of nasal staphylococcus aureus decreases the relapse rate in Wegener's
d) Plasma exchange is helpful in Wegener's where there is rapidly progressive renal failure
e) The is still a 20% five year mortality in systemic necrotizing vasculitis

Q3 Marfan syndrome:

a) Is always associated with mutilations in the fibrillin gene
b) Can be diagnosed by echocardiography alone
c) Is associated with a family history 30% of cases
d) Can diagnoses by fibrillin analysis
e) Typically causes dural ectasia

Q4 Skeletal dysplasias:

a) Are not commonly genetic in origin
b) Are usually caused by recessive mutations
c) May cause rhizomelic disproportion
d) May be caused by fibroblast growth factor receptor mutations
e) May be caused by Type V collagen defects

Q5 Congestive heart failure in rheumatoid arthritis:

a) Is most commonly due to myocarditis
b) Echocardiography is seldom useful
c) Never responds to steroids
d) Is an indication for angiotensin converting enzyme inhibitor therapy
e) Can occur with normal left ventricular systolic function

Q6 Cardiovascular mortality in rheumatoid arthritis:

a) Accounts for 10% of all deaths in RA
b) Is predominantly due to rheumatoid heart disease
c) Is the same as in the general population
d) May associate with the severity of RA
e) May be due to heart failure

Q7 Systemic Lupus Erythematosus disease in humans:

a) Is mostly genetically determined
b) Is likely to relapse after infection
c) Is associated with a reduced rate of apoptosis
d) Is more common in people originating from the Caribbean
e) May be associated with false positive tests for syphyllis

Q8 Autoantibodies in Systemic Lupus Erythematosus:

a) Only target nuclear antigens
b) May cause abnormal clotting tests
c) Are usually of IgM type
d) Reflect a failure of immune tolerance
e) Often include anti-smooth muscle antibodies

Q9 The following are usually associated with anti-cardiolipin antibodies:

a) Fetal loss
b) Thrombocytopenia
c) Erosive arthritis
d) Venous and arterial thrombosis
e) Coomb's test positive hemolytic anemia

Q10 The following are the recommended treatment of recurrent DVT in the Antiphospholipid Syndrome:

a) Subcutaneous heparin for three months
b) Prednisone followed by cyclophosphamide for six months
c) Warfarin for six months aiming for an INR of 1.8
d) Heparin followed by warfarin indefinitely aiming for an INR of 3 to 3.5
e) IV heparin, IV corticosteroid, IV cyclophosphamide and plasmapheresis

Q11 In reactive arthritis:

a) Organisms cannot be cultured from affected joints
b) Long term antibiotics alter the course of disease
c) HLA B27 influences disease severity
d) Enteric infection preceding arthritis is always symptomatic
e) Symmetrical small joint involvement is common

Q12 In ankylosing spondylitis:

a) More than 90% of patients with classical disease are B27+
b) All B27+ individuals are equally at risk of developing the disease
c) B27 restricted CD8+ T cells have been shown to play a critical role in pathogenesis
d) B27 positive transgenic rats only develop disease if gut flora are present
e) Patients have elevated titres of antibodies to Klebsiella

Q13 In spondyloarthropathy:

a) Uveitis can complicate all forms
b) Grade 3 sacroilitis is always present
c) The arthritis is resistant to anti-TNF therapies
d) A diagnosis can be made on the basis of inflammatory spinal pain and alternating buttock pain
e) Inflammatory bowel disease may be clinically silent

Q14 Concerning structure-modifying drugs:

a) Structure-modifying drugs for OA have been shown not only to be 'chondroprotective', but to have favourable effects on joint pain
b) We do not know if structure-modifying drugs have a beneficial effect on OA pain
c) Structure-modifying drugs have been shown to exacerbate joint pain in humans with OA
d) Structure-modifying drugs which result in a reduction in osteophyte size are accompanied by a decrease in joint pain, but those which retard joint space narrowing are not
e) Because they permit an increase in load bearing on the OA joint, structure-modifying drugs are associated with an increase in joint pain

Q15 In osteoarthritis:

a) Conventional radiography (eg, a standing anteroposterior knee radiograph) is the preferred outcome measure for evaluating structure-modifying drugs in OA clinical trials
b) Ultrasonography and magnetic resonance imaging are validated outcome measures for clinical trials of structure-modifying drugs in OA
c) An increase in knee flexion, as may occur with an increase in joint pain, may result in a decrease in the width of the medial tibiofemoral compartment joint space in a standing anterposterior knee radiograph
d) Fluoroscopic alignment of the knee joint with the X-ray beam results in poorer standardization of radiographic positioning than conventional radiography
e) It has been shown that progressive narrowing of the joint space in knee radiographs of patients with OA predicts progressive increase in joint pain and disability

Q16 Concerning doxycycline:

a) Doxycycline therapy has been shown to accelerate the progression of articular cartilage damage in OA
b) The putative benefits of doxycycline in OA have been attributed to its antimicrobical effects on Chlamydia
c) Doxycycline stimulates the transcription of mRNA involved in synthesis of cartilage matrix metalloproteinases, such as collagenase
d) Doxycycline stimulates the synthesis of inducible nitric oxide synthase, enhancing blood flow to the OA joint and thereby facilitating cartilage repair
e) Protective effects of doxycycline in animal models of OA provide no assurance that it will have a similar effect in humans

Q17 In the context of primary systemic vasculitic syndromes:

a) ANCA assays have equal sensitivity in limited disease and systemic disease involving the lung/kidney
b) Two major staining patterns can be identified on indirect immunofluorescence – cytoplasmic and peri-nuclear which respectively correspond to myeloperoxidase and proteinase 3 specificities using solid phase ELISA assays
c) A cANCA staining pattern is observed most frequently in Wegener's Granulomatosis
d) Acute respiratory failure with diffuse bilateral alveolar infiltrates is almost always due to pulmonary haemorrhage
e) A high CRP is strongly suggestive of infection

Q18 In Systemic Lupus Erythematosus:

a) Fever is almost always associated with a raised CRP
b) Rigors in a patient with active disease most commonly indicates infection
c) Bronchoscopy and bronchoalveolar lavage may help to distinguish pulmonary haemorrhage from opportunistic pulmonary infection
d) Raised complement levels and high titres of anti ds DNA antibodies correlate with active renal disease
e) There is an increased susceptibility to disseminated neisserial and salmonella infection

Q19 TNF blockade works by:

a) Binding and inactivation of soluble TNF
b) Binding and inactivation of membrane bound TNF
c) Cytotoxicity of TNF producing cells
d) Inhibition of cell migration
e) Inhibition of neovascularisation

Q20 TNF blockade is contraindicated in case of:

a) Active bacterial infection
b) Viral infection
c) History of malignancy
d) Pregnancy
e) Allergic reaction to mouse murine antigen-binding part of monoclonal antibodies