SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME
(Code SMJ 201706B)

Question 1. Wunderlich syndrome is a potentially life-threatening condition that classically presents with:
(a) Chest pain and breathlessness.
(b) Loin pain and palpable mass.
(c) Haematuria.
(d) Hypovolaemic shock.

True False
□   □
□  □
□   □
□  □

Question 2. Regarding Wunderlich syndrome:
(a) Neoplastic causes are the most common, among which the tumour most frequently resulting in spontaneous haemorrhage is renal cell carcinoma.
(b) Angiomyolipomas (AMLs) are the most common benign tumours that cause spontaneous renal haemorrhage.
(c) Blood dyscrasias are associated with the syndrome.
(d) It is diagnosed predominantly on clinical grounds with little role for imaging investigations.

True False
□  □
□  □
□  □
□  □

Question 3. Regarding the appearance of AMLs on computed tomography (CT):
(a) AMLs are hypervascular with mixed areas of soft tissue and central necrosis.
(b) It is characteristic, but not pathognomonic, of AMLs to appear as fat-containing renal tumors.
(c) AMLs consist of mature fat, smooth muscle and aberrant vasculature, and can only be diagnosed on CT when all components are visibly identifiable.
(d) Larger AMLs have a higher chance of spontaneous haemorrhage compared to smaller ones.

True False
□  □
□  □
□  □
□  □

Question 4. Regarding imaging investigation of Wunderlich syndrome:
(a) Arterial phase contrast-enhanced CT is the imaging investigation of choice.
(b) All patients require direct catheter angiography to identify potential pseudoaneurysms.
(c) Follow-up imaging is required to exclude an underlying neoplasm masked by the initial subcapsular and perirenal haematoma.
(d) Cross-sectional imaging with MR imaging may help characterise an underlying lesion following haemorrhage.

True False
□  □
□  □
□  □
□  □

Question 5. Regarding management of Wunderlich syndrome:
(a) Haemodynamically unstable patients can be managed conservatively in the absence of initial imaging findings of haemorrhage and infection.
(b) Only pseudoaneurysms larger than 4 cm require treatment, as smaller lesions are unlikely to have complications.
(c) In the presence of sepsis, infected perinephric haematomas should be evacuated.
(d) Endovascular techniques in haemostasis form the mainstay of primary treatment in haemodynamically stable patients.

True False
□  □
□  □
□  □
□  □

Doctor’s particulars:
Name in full : ____________________________________________________________
MCR number : ____________________________________ Specialty: ____________________________
Email address : __________________________________________________________

SUBMISSION INSTRUCTIONS:
(1) Visit the SMJ website: http://www.smj.org.sg/current-issue and select the appropriate set of questions. (2) Provide your name, email address and MCR number. (3) Select your answers and click “Submit”.

RESULTS:
(1) Answers will be published online in the SMJ August 2017 issue. (2) The MCR numbers of successful candidates will be posted online at the SMJ website by 6 August 2017. (3) Passing mark is 60%. No mark will be deducted for incorrect answers. (4) The SMJ editorial office will submit the list of successful candidates to the Singapore Medical Council. (5) One CME point is awarded for successful candidates.