SINGAPORE MEDICAL COUNCIL CATEGORY 3B CME PROGRAMME
(Code SMJ 202205A)

1. Low tissue oxygenation (tissue hypoxia) can occur even when the oxygen supply exceeds tissue demand.
2. Mean arterial pressure is defined as the average of the systolic blood pressure and the diastolic blood pressure.
3. Tissue oxygen supply is predominantly determined by blood pressure, haemoglobin concentration and arterial blood oxygen saturation.
4. Circulatory shock can occur in the absence of hypotension.
5. A capillary refill time of six seconds always indicates circulatory shock.
6. Skin mottling limited to the knee caps excludes circulatory shock.
7. In fluid-responsive patients, systolic blood pressure should increase by at least 10% following a fluid bolus.
8. A fluid challenge consists of 500 mL of crystalloid solution given over < 30 minutes.
9. Noradrenaline is a medication that can improve blood pressure.
10. Noradrenaline is a medication that must be given only via central lines.
11. In a patient with circulatory shock, a central venous oxygen saturation of 60% indicates inadequate oxygen supply to satisfy tissue demand.
12. In a patient with circulatory shock, a central venous oxygen saturation of 80% excludes the possibility of inadequate oxygen supply.
13. In a patient with septic shock, a central venous oxygen saturation of 70% indicates haemodynamic optimisation.
14. CO₂ gap is computed as PaCO₂ – PcvCO₂, where PaCO₂ is arterial carbon dioxide partial pressure and PcvCO₂ is central venous carbon dioxide partial pressure.
15. A CO₂ gap of 8 mmHg indicates low cardiac output.
16. A CO₂ gap of 8 mmHg indicates anaemia.
17. In a patient with circulatory shock, the haemoglobin target should be at least 10 g/dL.
18. Ankle blood pressure may be used to detect hypotension.
19. An over-damped arterial line system will lead to falsely low mean arterial pressure.
20. An under-damped arterial line system will lead to falsely low diastolic blood pressure.

True False
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Doctor’s particulars:
Name in full: ____________________________ MCR no.: ____________________________
Specialty: ____________________________ Email: ____________________________

SUBMISSION INSTRUCTIONS:
Visit the SMJ website: http://www.smj.org.sg/current-issue and select the appropriate quiz. You will be redirected to the SMA login page.
For SMA member: (1) Log in with your username and password (if you do not know your password, please click on ‘Forgot your password?’). (2) Select your answers for each quiz and click ‘Submit’.
For non-SMA member: (1) Create an SMJ CME account or log in with your SMJ CME username and password (for returning users). (2) Make payment of SGD 21.40 (inclusive of 7% GST) via PayPal to access this month’s quizzes. (3) Select your answers for each quiz and click ‘Submit’.

RESULTS:
(1) Answers will be published online in the SMJ July 2022 issue. (2) The MCR numbers of successful candidates will be posted online at the SMJ website by 29 July 2022. (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. (6) SMC credits CME points according to the month of publication of the CME article (i.e. points awarded for a quiz published in the December 2021 issue will be credited for the month of December 2021, even if the deadline is in February 2022).