## A blood smear on admission

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## CASE REPORT

A 69-year-old woman was admitted to the intensive care unit (ICU) with a one-day history of coughing, nausea and drowsiness. She was a profound smoker and drank 3 units of alcohol daily. Medical history revealed myocardial infarction. Known prescribed medications were metoprolol, quinapril, pravastatin and carbasalate calcium. Physical examination showed a respiratory rate of 35/minute, heart rate of 82/minute, blood pressure of 129/62 mmHg and a tympanic temperature of 36.1°C. She had a poor circulation with cold extremities and prolonged capillary refill. We observed a Glasgow coma scale of E3M5V3, no meningism or skin abnormalities; lumbar puncture was not performed because of low suspicion and severe coagulopathy. She had poor dental condition and had recently lost a tooth. Blood gas analysis showed mild respiratory compensated metabolic acidosis (pH 7.47, pCO<sub>2</sub> 3.6 kPa, HCO<sup>3-</sup> 19.7 mmol/l, base excess -3.1 mmol/l) and reasonable oxygenation (pO, 9.1 kPa, SatO, 95%). Laboratory results showed a normal haemoglobin level (8.7 mmol/l), leucocytopenia/thrombocytopenia (2.8 x 109/l and 50 x 109/l, respectively), severe coagulopathy (APTT 80 seconds, PT 31 seconds, INR 2.0), C-reactive protein 237 mmol/l, lactate 3.6 mmol/l, creatine kinase 1096 U/l and acute kidney injury with a creatinine of 150 µmol/l. Chest X-ray and CT scan of the cerebrum, thorax and abdomen showed no abnormalities. We suspected sepsis, collected blood cultures and started treatment Figure 1. Peripheral blood smear on admission



with broad-spectrum antibiotics according to the hospital protocol (penicillin 12 million units a day, clindamycin 600 mg four times a day and a single dose of 360 mg gentamicin). A peripheral blood smear was also done at admission, as shown in *figure 1*.

## WHAT IS YOUR DIAGNOSIS?

See page 423 for the answer to this photo quiz.