**Nephrology Dialysis Transplantation**

**Nephroquiz for the Beginner**
(Section Editor: T. J. Rabelink)

**Fever, shivering ... and blue urine**

A 51-year-old male (GC, speaking Italian only) was admitted to our hospital in Austria because of shivering, fever and dysuria for approximately 2 days. Clinical evaluation revealed no abnormal findings at physical examination. Blood pressure was 150/80 mmHg, pulse was 80 per minute and body temperature was 39.6°C. The patient denied any irregularities regarding stool.

Routine laboratory tests showed an elevated white blood cell count of 17.9 G/l and a C-reactive protein of 153 mg/l. The patient was asked to provide urine for examination and a few minutes later he brought a beaker with blue urine (Figure 1). Dipstick urine analysis revealed leukocytes +++, nitrit +, protein +, and erythrocytes +. Microscopic examination showed numerous leucocytes (Figure 2). Renal sonography was normal.

**Question**
What is the diagnosis in this Italian tourist? Why is the urine blue? (Answer on next page).

*Fig. 1. Urine sample from patient GC after centrifugation at 2000 rev/min for 10 min. Pay attention to the arrow!*

*Fig. 2. Urine sediment of patient GC (Papanicolaou stain, × 400), with few uroepithelial cells and masses of (neutrophil and eosinophil) granulocytes.*
The diagnosis was urinary tract infection, and blue coloured urine due to ingestion of methylene blue.
There is a saying that ‘travelling educates’, but travellers may do so too with doctors.

References

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