

**Follow-up of abnormal urine test result in infant  
(04HDC08084, 31 March 2005)**

*General practitioner ~ Medical centre ~ Infant ~ Fever ~ Atypical haemolytic uraemic syndrome ~ Differential diagnosis ~ Investigation ~ Abnormal test results ~ Follow-up ~ Timeliness ~ Standard of care ~ Systems ~ Vicarious liability ~ Rights 4(4), 6(1)(f)*

A seven-month-old infant who was feverish, not sleeping well, not hungry, and was fatigued, was taken by his parents to an after-hours accident and medical centre. The doctor diagnosed a probable viral illness and recommended that they take the boy to his general practitioner (GP) for review and a urine test in eight hours' time.

The GP confirmed the earlier diagnosis of probable viral illness but wished to exclude a urinary tract infection (UTI). He ordered a urine test, and a sample was taken via a urinary bag. A dipstick test revealed a high protein count with no other abnormal findings. However, as the findings were inconclusive, the doctor sent the sample for laboratory testing, including a full culture and urine analysis. He told the parents that there was an abnormality and that he would contact them if results from the further testing indicated a urinary infection. He told them to bring the boy back if the fever did not settle or if they had further concerns.

The laboratory results, received the following day, showed large amounts of protein and blood pigment, but no significant bacteria. As this effectively excluded a UTI and confirmed the working diagnosis of viral illness, the GP filed the results and took no further action.

Three weeks later, another GP at the clinic saw the infant when he presented with a two-day history of diarrhoea, and diagnosed viral gastroenteritis. Five weeks later, the parents returned as the boy appeared generally unwell. The second GP diagnosed an allergic reaction, but ordered urine tests, which again reported a large protein and blood pigment count, as well as the presence of casts (an indication of renal disease). The GP was concerned about the boy's condition and had him admitted to hospital, where he was diagnosed with atypical haemolytic uraemic syndrome (HUS) with accompanying hypertension and anaemia.

It was held that although the first GP was not expected to be able to diagnose a condition that was extremely rare and was presenting atypically, he was expected to recognise any variation from normal and follow it up appropriately. High protein and haematuria in a seven-month-old infant should be considered significant until follow-up test results show otherwise. By not following up the abnormal urine test results, the GP did not provide services that minimised the potential harm to the infant, and so breached Right 4(4). By not informing the parents about the abnormal test results, he was also found to have breached Right 6(1)(f).

The clinic was found to have good systems in place for the receipt of test results and was not found responsible for the GP's error in judgement.