

SPSO decision report

Case: 201300967, Greater Glasgow and Clyde NHS Board - Acute Services Division
Sector: health
Subject: clinical treatment / diagnosis
Outcome: some upheld, recommendations

Summary

Mr C complained about the board's treatment of his daughter (Miss A). When Miss A was two, she drank some of the contents of a bottle of Calpol (paracetamol-based medicine) and was taken to the emergency department at the Victoria Infirmary. National guidance for paracetamol poisoning requires staff to calculate the amount of paracetamol ingested (taken) per kilogram of the person's body weight (calculated as mg/kg). If the patient is thought to have taken more than 75mg/kg of paracetamol, blood tests should be taken four hours after ingestion to check for paracetamol levels. If more than 150mg/kg has been taken, the patient should be treated immediately with n-acetylcysteine (a drug used to treat paracetamol poisoning) without waiting for blood test results. Based on the available evidence, staff estimated that Miss A had likely taken less than 75mg/kg of paracetamol, and she was discharged home with advice to return if she started to vomit. Later that evening, Miss A vomited and was taken back to the hospital. Staff re-estimated how much paracetamol she might have ingested. Believing she might have had more than 100mg/kg, they arranged for her to be transferred to the Royal Hospital for Sick Children. There, staff assumed the worst case scenario and immediately started treatment with n-acetylcysteine. Blood tests taken later showed that she had ingested a non-toxic amount of paracetamol.

Miss A had a severe anaphylactic (allergic) reaction to the n-acetylcysteine. This was treated successfully, but she was kept in hospital, and later had a seizure. This affected her eyesight. Miss A was diagnosed with cortical blindness (blindness caused by damage to the brain). Mr C complained that the board's staff did not do enough to establish the extent of his daughter's paracetamol poisoning when she first went to the Victoria Infirmary. He felt that, had a blood test been carried out then, his daughter would not have required treatment with n-acetylcysteine, would not have had an allergic reaction and would not have developed cortical blindness.

We found that the national guidance recommended that patients should only be discharged when there is absolute certainty that they have not ingested more than 75mg/kg of paracetamol. After taking independent medical advice on Miss A's case, we did not consider that it was possible for staff to be absolutely certain and as such, blood tests should have been carried out to confirm how much paracetamol she had ingested. This would have shown that she had ingested a non-toxic amount; n-acetylcysteine treatment would not have been required and her anaphylactic reaction would have been avoided. We also found that the n-acetylcysteine had been administered incorrectly, with the first dose being administered over a period of 15 minutes. The national guidance had changed some months earlier and it should have been administered over one hour, specifically to reduce the likelihood of allergic reaction. We were critical of the board's processes for sharing medication guidance updates with clinical staff.

We accepted advice, however, that Miss A's anaphylactic reaction was not the most likely cause of her subsequent seizure and cortical blindness. Whilst this could not be ruled out entirely, we accepted that a virus that Miss A had been suffering from was the more likely cause.

We also investigated a further complaint from Mr C about delays to the board's handling of his formal complaint, and were satisfied that they handled it in line with their complaints procedure.

Recommendations

We recommended that the board:

- apologise to Miss A and her family for their poor treatment of her suspected paracetamol poisoning; and
- review their mechanisms for communicating updated guidance to ensure that staff in all departments are aware of, and working to, the most up-to-date guidance at all times.