

drop. We assumed this was a good thing as we'd been told to bring the temperature down. However, William didn't seem to be improving, he was deathly pale, and had begun to vomit green bile. In addition, he seemed very cold to touch. He was upset most of the time, whimpering, but very tired and wanting to sleep all the time. We decided to call 111 to seek advice, as we were unsure about what to do.

Calling 111 was very typical; they triaged and asked lots of questions, and we answered them as best we could. We explained that William had had a persistent cough for a number of weeks. We described the visits to the doctors, especially the one the day before, that William's temperature had been 40.1°C and was now 35.4°C, that he was pale, vomiting green bile, he was cold to touch and he wasn't really wetting his nappies. During the phone call William could be heard whimpering in the background. The call handler triaged our phone call and the disposition was found to be a non-urgent three-hour call back from a clinician. We were given basic advice about William's temperature and the call was ended. Satisfied that we were doing the right thing, we waited for the out-of-hours doctor to return our call. William's condition didn't improve and at around 6.15 pm I put him to bed as he was simply exhausted. At around 7.00 pm the doctor called back and we explained the situation. William, by this point, was asleep in bed. I asked 'In your professional opinion what do you think I should do?' The doctor replied that we should leave him in bed, with plenty of rest, fluids and give him Calpol if his temperature rose again, that it was likely a viral infection and would get better without treatment. Reassured we were doing the right thing, we left William to sleep. He had been assessed by his primary GP, we had called 111 and we had spoken to another clinician in one 24-hour period. We were hoping that William would feel much brighter in the morning.

We checked on William throughout the night, he was sleeping fairly soundly, and his temperature hadn't risen. At 5.30 am we checked on him and he had a little water and

went back to sleep. I woke shortly after 8 am and looked at the camera monitor and William was sleeping. I got up and went to check on him. William's room had black out blinds and I hadn't put my glasses on so I couldn't see much. I went over to William in the cot and stroked his cheek but he didn't move. I knelt down and put my arms through the bar of the cot and stroked his arm, which was fairly cool, but he didn't stir. I stoked his side and he was stiff. I immediately opened the blinds and I could see that William was dead.

I'm not quite sure when the screaming ended. Perhaps when the paramedics arrived, perhaps when they turned to me and said, 'I'm sorry my love but he's gone', seven minutes after arriving, or perhaps when I had to walk out of hospital without my beloved baby. I don't think the screaming has ever stopped in my head. I didn't know why and I didn't know how, all I knew was that my baby was gone.

As William died at home unexpectedly he had to go away for a post-mortem examination. The results from this can take a number of weeks, but it was very obvious very quickly that something wasn't right. William died on 14 December. After eight days the coroner telephoned me and asked, 'had William had a cough at all?'. 'Yes', I replied. The pathologist had found that William had a left collapsed lung, an abscess in his left upper lung lobe, a pleural effusion with over 200 mls of viscous fluid in his left lung cavity, pneumonia in both lungs, heavy inner and outer ear infection and sepsis. 'Sepsis' I replied. 'What's that?' Not only had William been let down in the most devastating way, I didn't know this condition that had ultimately claimed his life.

In the weeks leading to William's death, he in fact had a bacterial chest infection. When the vomiting started this was the early stages of pneumonia. In the last week or so of his life the pleural effusion was developing and in the last couple of days of his life sepsis took over his body. There were 16 failings in William's care and four missed opportunities to save his life. Not only had the doctors misdiagnosed

the chest infection and pneumonia, they had failed to spot he was suffering with sepsis. Not only that, they had not informed us or provided us with any safety netting advice about what to look out for should William's condition worsen.

As a family, once the investigations into his death had concluded, we tried to concentrate on raising awareness of a condition that is causing so many avoidable and preventable deaths in the UK. We chose not to focus on individuals but rather change a system that was set up to fail.

I am delighted to be working with key people within the dental industry to ensure that dental staff are aware of sepsis, and to 'think sepsis', especially when treating an infective patient, a pre-infective patient and when prescribing antibiotics.

## Conclusion

The key message to remember is to stop and think, could this be sepsis in someone who presents with signs or symptoms that indicate possible infection. Careful questioning and rapid response could make the difference between life and death in a person on the edge of tipping into sepsis.

1. National Institute for Health and Clinical Excellence. Sepsis: recognition, diagnosis and early management. NICE guideline 51. 2016. Available at <https://www.nice.org.uk/guidance/ng51> (accessed November 2018).
2. Shankar-Hari M, Phillips G S, Levy M L *et al*. Developing a New Definition and Assessing New Clinical Criteria for Septic Shock For the Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3). *JAMA* 2016; **315**: 775–787.
3. The Sepsis Trust. Homepage. 2018. Available at [www.sepsistrust.org](http://www.sepsistrust.org) (accessed November 2018).
4. Daniels R, Nutbeam T, McNamara G, Galvin C. The sepsis six and the severe sepsis resuscitation bundle: a prospective observational cohort study. *Emerg Med J* 2011; **28**: 507–512.
5. NIHR Signal. Giving immediate antibiotics reduces deaths from sepsis. 2017. Available at <https://discover.dc.nihr.ac.uk/content/signal-000394/giving-immediate-antibiotics-reduces-deaths-from-sepsis> (accessed November 2018).
6. Carter L, Lewis E. Death from overwhelming odontogenic sepsis: a case report. *Br Dent J* 2007; **203**: 241–242.
7. Gilway D, Brown S J. Medical emergencies: Sepsis in primary dental care. *Br Dent J* 2016; **220**: 278.

## Correction

Opinion article *Br Dent J* 2018; **225**: 927–929

When this article was initially published the International Association for Dental Research was incorrectly referred to as the International Association of Dental Research.

The author apologises for any confusion caused by this error.