Medical Imagery

**Diffuse *Escherichia coli* gaseous abscesses**

A 73-year-old woman with a history of diabetes mellitus presented to the hospital with a fever >39 °C of 5-day duration associated with left hip, left sacroiliac, and lower back pain and a painful cervical swelling. Laboratory findings revealed an inflammatory syndrome (C-reactive protein 245 mg/l and neutrophil count 29.6 × 10⁹/l) and uncontrolled diabetes (fasting plasma glucose level 37.3 mmol/l and glycosylated haemoglobin 14%). Computed tomography (CT) revealed a left kidney abscess, left hip and sacroiliac effusions, L3–L4 spondylodiscitis with a left erector spinal muscle abscess, and a thyroid abscess responsible for a right-sided tracheal deviation (Figure 1). Gas bubbles were observed in all of these lesions and along the epidural space. Cultures of blood, urine, and puncture samples from the left hip and the thyroid yielded an *Escherichia coli* strain, without anaerobes. A 12-week regimen of cefotaxime and ciprofloxacin along with surgical drainage of the thyroid abscess and strict glycaemic control allowed a favourable outcome, with no relapse after 2 years of follow-up. This case is a reminder of the high prevalence of *E. coli* infections in patients with poorly controlled diabetes, which can be associated with gas production, not confined to anaerobes.¹,² Diffuse involvement and the extension of gas into the epidural space are rare, as are thyroid abscesses,

---

which can be triggered by underlying thyroid pathogenic conditions.3

Acknowledgements

The Lyon Bone and Joint Infection Study Group comprises the physicians Florence Ader, François Biron, André Boibieux, Evelyne Braun, Christian Chidiac, Fatih Daoud, Tristan Ferry, Yves Gillet, Laure Hees, Johanna Lippman, Patrick Maillhes, Thomas Perpoint, Sandrine Roux, Julien Saison, Marie-Paule Vallat, and Florent Valour; the surgeons Cédric Barrey, Jean-Baptiste Bérard, Fabien Boucher, Pierre Breton, Olivier Cantin, Philippe Chaudier, Romain Desmarchelier, Michel-Henry Fessy, Stanislas Gunst, Timothée Jacquesson, Emmanuel Jouanneau, Sébastien Lustig, Ali Mojallal, Philippe Neyret, Adrien Peltier, Olivier Reynaud, Hristo Shipkov, Francesco Signorelli, Thibault Vermersch, and Anthony Viste; the microbiologists Céline Dupieux, Frederic Laurent, Jean-Philippe Rasigade, and François Vandenesch; the nuclear medicine specialists Francesco Giammarile, Marc Janier, and Isabelle Morelec; the PK/PD specialists Marie-Claude Gagnieu, Sylvain Goutelle, and Michel Tod; the clinical research assistant Eugénie Mabrut.

Conflict of interest: None, for all authors.

References

