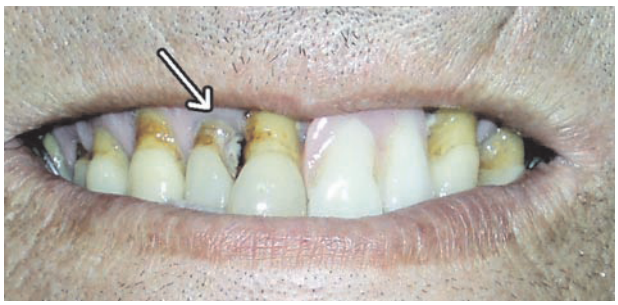
SNAPSHOT

Lead poisoning and Burton's line



A 66-year-old, previously well man presented with colicky abdominal pain and vomiting. He was a cigarette smoker and consumed homemade spirits daily. On physical examination, the patient had poor dentition, a bluish pigment along the gingival line (Figure, arrow), and generalised abdominal tenderness with no peritonism; he was afebrile with a heart rate of 68 beats/min, blood pressure of 190/90 mmHg with no postural drop, and oxygen saturation of 99% in room air; and all other results were normal. Full blood examination revealed normocytic anaemia (haemoglobin, 90 g/L; reference range, 130–180 g/L) and basophilic stippling. The patient's blood lead level was elevated at 7.10 μmol/L (reference range, < 0.48 μmol/L), but fell to 2.28 μmol/L after 3 weeks of treatment with the chelating agent 2,3-dimercaptosuccinic acid (DMSA).

Burton's lead line indicates lead poisoning and occurs due to deposition of lead sulfide, the result of a reaction between sulfur produced by oral flora and lead.[1,2] The source of this patient's lead exposure is unknown. Distilling equipment, especially for spirits, can be a source of lead exposure,[3] but testing of this patient's equipment ruled it out as a source.

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1 Pearce J. Burton's line in lead poisoning. *Eur Neurol* 2007; 57: 118-119.
2 Nogue S, Culla A. Burton's line. *N Engl J Med* 2006; 354: e21.
3 Holstege CP, Ferguson JD, Wolf CE, et al. Analysis of moonshine for contaminants. *J Toxicol Clin Toxicol* 2004; 42: 597-601. ❑