We report persistent galactorrhoea and raised prolactin in a woman taking methadone, which is commonly prescribed for the treatment of opiate dependence. A heroin smoking 28 year old mother of two (younger child aged 4), with hepatitis C (of nine years’ duration), weighing 50 kg, was first prescribed 30 mg methadone a day for opiate dependence. She reported newly emergent galactorrhoea after four months of taking methadone, when the dose was increased to 40 mg. The subsequent persistent galactorrhoea required her to use breast pads.

Her prolactin concentrations over the next year were raised at 1500, 780, and 910 mIU/l. We confirmed hyperprolactinaemia may be under-reported in patients using methadone.

We found no breast abnormalities other than tenderness; a negative pregnancy test; normal thyroid status; normal range concentrations of oestrogen, follicle stimulating hormone, and lutreinising hormone; and an unremarkable head magnetic resonance imaging scan with contrast. She remains amenorrhoeic.

Hyperprolactinaemia with chronic methadone use is described in three reports to the UK Committee for the Safety of Medicines but is not mentioned in the British National Formulary or the summary of product characteristics for methadone.

Tolis and colleagues (in 1978) showed a clear rise in plasma prolactin after acute administration of methadone in humans, reversed by dopamine agonists.

Pituitary prolactin release is tonically inhibited by dopamine secreted from hypothalamic tuberoinfundibular neurones. Tubero-infundibular activity is suppressed by opiate agonists, via μ and κ receptors, thereby increasing release of prolactin.

This case suggests that tolerance does not occur to the prolactin enhancing effect of methadone, consistent with experimental studies.

Drug rechallenge could not be done, so causality is not proved. But together with previous reports and experimental findings, this case indicates an association between galactorrhoea and methadone use.

Galactorrhoea and other effects of hyperprolactinaemia may be under-reported in patients using methadone.

Funding: None.

Competing interests: None declared.


(Accepted 20 February 2006)