Reviewer's report

**Title:** Chronic calcium pyrophosphate crystal inflammatory arthritis induced by extreme hypomagnesemia in short bowel syndrome

**Version:** 1  **Date:** 9 July 2012

**Reviewer:** Jeremy Nightingale

**Reviewer's report:**

This interesting case report is of a patient who has hypomagnesaemia secondary to malabsorption due to a short bowel (jejuno-colic anastomosis due to trauma) and various food intolerances, and who also has joint pains due to calcium pyrophosphate. It is proposed that the hypomagnesaemia causes the joint problems because treatment of hypomagnesaemia (in addition to low vitamins D & B12, calcium and zinc) allowed the oral steroid dose to be reduced as symptoms improved.

**Minor points**

P3 metabolic problems occur if less than 200 cm and no colon. Not 300-350 cm as stated.

P4 what is gonarthritis?

P4 Underweight - what was BMI at this time?

P5 What is adynamia?

P5 The magnesium resorption test is interesting (P5). Please specify how it is done.

P6 I am surprised breath hydrogen was not raised usually it is very high at rest in jejunum-colon patients so the test cannot be performed.

P6 As gut length is 185 cm anastomosed to half the colon, I am very surprised by the hypomagnesaemia. The authors justify it with the additional food intolerances.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.