Reviewer's report

**Title:** Cotrel-Dubousset instrumentation for the correction of adolescent idiopathic scoliosis. Long-term results with an unexpected high revision rate.

**Version:** 1  **Date:** 18 March 2012

**Reviewer:** James W Ogilvie

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Page 1. The article in Spine by Wood KB, et al. demonstrates that C-D rotates the entire spine and not selective derotation of the apical vertebrae.

Page 2. This is an interesting admission that prophylactic antibiotics were not given immediately pre-operative and intra-operative if needed. The literature does not support the efficacy of post-operative antibiotics. Because the follow up is 35%, this report is Level IV significance. Is the follow up determined by the time to last x-ray or time of the telephone follow up?

Page 3. Are the statistics for the secondary curve those that were instrumented or spontaneous correction? What was the standard deviation for primary curve correction at final follow up? Was there a uniform loss of correction or did some not progress as in Lenke’s report and others progress significantly implying failed fusion?

Page 4. An infection rate of 10% is alarming. Was the time to revision for infection different from those for other indications, i.e. were they early or late infections? Loose or broken implants and metallosis all imply motion suggestive of failed fusion. Were x-rays obtained at 14.3 years?

Page 6. Soft tissue rubbing on metal causes a burse. Metal on metal movement causes fragmentation or metallosis. Lenke’s report (22) of no broken implants or correction loss at 6 years implies a solid fusion.

Page 7. Fastidious and exotic organisms require prolonged incubation and or different media for identification.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

'I declare that I have no competing interests'