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SILVER Trial

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Objectives

The SILVER Trial (Silver Impregnated Line Versus EVD Randomised Trial) was designed to assess the clinical effectiveness of silver-impregnated EVDs against infection.

Design

This was a double-blind randomised controlled trial comparing silver-impregnated EVDs to plain EVDs.

Subjects

Patients who were admitted for the management of their intracranial pathology were considered for the trial according to inclusion and exclusion criteria. Patients who required an EVD were randomised to receive either a silver-impregnated EVD or a plain EVD.

Methods

The chosen primary end-point for this trial was cerebrospinal fluid infection as defined by organisms seen on microscopy or culture. Secondary end-points included the duration of EVD placement and requirement for ventriculo-peritoneal shunting.

Results

Results from 278 patients were available for analysis (140 in Study Arm A, 138 in Study Arm B). The overall infection rate was 16.9 % (47/ 278). Study Arm A had an infection rate of 21.4% (30/140) whilst Study Arm B had an infection rate of 12.3% (17/138). This was found to be a significant difference (p (less than) 0.05).

Conclusions

This randomised trial has been concluded and the results are awaiting ratification by the Data Monitoring Committee prior to unblinding of the study arms.

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