
Abstract:

BACKGROUND: Totally implantable vascular access devices are widely used in people with cystic fibrosis to provide intermittent venous access for therapeutic infusions. Their use is associated with some complications such as thrombosis, embolism and infection.

OBJECTIVES: To assess if totally implantable venous access devices provide a safe and effective route for venous access for intermittent administration of intravenous antibiotics in people with cystic fibrosis. Also to assess strategies to reduce possible complications of totally implantable venous access devices (e.g. anticoagulants to reduce the risk of thrombosis).

SEARCH METHODS: We searched the Cochrane Cystic Fibrosis and Genetic Disorders Group Trials Register which comprises references identified from comprehensive electronic database searches, handsearches of relevant journals and abstract books of conference proceedings. Date of the most recent search: 05 April 2012.

SELECTION CRITERIA: Randomised and quasi-randomised controlled trials which compared the use of totally implantable venous access devices in people with cystic fibrosis to other means of vascular access, trials which compared the different types of these devices against
each other and trials which assessed strategies to reduce complications of these devices.

DATA COLLECTION AND ANALYSIS: No relevant trials were identified.

MAIN RESULTS: No trials were included in this review.

AUTHORS’ CONCLUSIONS:® Totally implantable vascular access devices are widely used in people with cystic fibrosis to provide intermittent venous access for therapeutic infusions. Reports of their use in people with cystic fibrosis suggest that they are safe and effective. These reports also suggest that certain interventions might reduce the risk of complications; however, it is disappointing that these reports have not been assessed by randomised controlled trials. This systematic review identifies the need for a multicentre randomised controlled trial assessing both efficacy and possible adverse effects of totally implantable venous access devices in cystic fibrosis.