VAD Driveline Infections Along Two Different Periods of Treatment

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Background: The main complication of long-term LVAD surgery is infection around the Drive Line. To reduce the rate of infection, and improve the quality of care a unique system was established for treating and monitoring these patients. The purpose of this work to examine the incidence of infections in both time periods, before and after implementation of the unique treatment.

Methods: In 2008, we began LVAD implantation in our department, until the end of 2009 the patients were treated as ordinary patients. In order to improve the outcomes and work processes, many changes and activities have been introduced in the management of these special patient care. A clinic was Established according to 3 criteria: monitoring by a surgeon, cardiologist and vad coordinator as well as a broad multidisciplinary team, visits by protocol, blood tests, right heart catheterization, and Echo, and a weekly phone call for early detection of complications. The surgical technique has been modified - the cable is mostly left in abdominal wall. in addition the technique for dressing the wound around DL has been improved (sterile technique, anti-bacterial dressings, double fixing) training program have been establish to educate hospital staff and the community caregivers.

Results: in 2008-2009 were analyzed 7 patients had surgery, 5 of them were released to their home, all of them suffered deep infections around DL, requiring broad-spectrum antibiotics for long periods of time, two of them required debridement surgery.

In 2010-2011 after these changes were implemented 17 patients had surgery, 13 were released to their home, only one patient had a deep infection of DL, 2 patients had superficial infection treated with oral antibiotics, use a double concentration antimicrobial dressing and they recovered.