Srce i mehanička podrška: sinergija, antagonizam, natjecanje...

The Heart and Mechanical Support: Synergy, Antagonism, Competition...

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Uvod: Uređaji za mehaničku cirkulacijsku potporu postaju realna alternativa transplantaciji srca u sadašnjoj situaciji kontinuiranog povećanja broja bolesnika sa srčanim zatajivanjem i nedovoljnoj dostupnosti doniranih organa.[1] Mnogo napora je uloženo da bi se optimizirao tehnički dizajn, karakteristike protoka i trajnost uređaja te smanjile moguće komplikacije. Gastrointestinalo krvarenje jedan je od glavnih problema i javlja se kod 19-40% bolesnika. Druga komplikacija po učestalosti su tromboembolijski događaji koji mogu rezultirati neurološkim komplikacijama, s ukupnom pojavnosti moždanog udara od oko 10%.[2] Ukupna pojavnost tromboze pumpe je od 2 % do 5 %, a infekcije izlaznog mjesta perkutanog kabela iznosi 10 %.

Prikaz slučaja: Prikaz slučaja bolesnice u kardiogenom šoku priključene na izvantjelesnu membransku oksigenaciju, a potom na trajnu mehaničku podršku lijeve klijeke, koja je dvije godine nakon događaja u stanju da se može uredno baviti svojim dnevnim i profesionalnim aktivnostima govori o nužnosti postojanja mehaničke cirkulatorne podrške, ali i potrebi daljnjeg usavršavanja, jer unatoč kontinuiranom smanjenju pojavnosti komplikacija vezanih za uređaj neka pitanja i dalje ostaju otvorena, a bolja biokompatibilnost je najveće pitanje.

Zaključak: U većine bolesnika ne javljaju se nikakvi problemi, i prema većini bolesnika kvaliteta života uz ugrađenu mehaničku potporu je dobra, ali još uvijek postoji određeni postotak bolesnika s ozbiljnim problemima.

Introduction: Device for mechanical circulatory support are becoming real alternative to heart transplants because of continuous increases in number of patients with heart failure and insufficient heart donors.[1] Many efforts have been made to optimize the technical design, flow characteristics and durability of the devices. Although the technology is now at a high level, there are still problems relating to the nature of the device. Gastrointestinal bleeding is a major problem and 19-40% of patients with implanted support suffer from that problem. Another problem is thromboembolic events that may result in neurological complications, with overall incidence of stroke of about 10%. The overall incidence of pump thrombosis is 2 -5%, and infection of the exit line of percutaneous cable is 10%.[2]

Case report: Case of the patients in cardiogenic shock placed on extra corporeal membrane oxygenation followed by LVAD implantation and two years there after she is able to sustain her personal and professional activities, says that there is real need for mechanical support, but also the need for further improvement of device. Despite the continuous reduction in the incidence of complications related to device some questions remain unanswered, and better biocompatibility is the biggest question.

Conclusion: Most patients with implanted mechanical support do not have any problems, and according to most patients quality of life with mechanical support is good, but there is still a certain percentage of patients with serious problems.

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