

## Priprema i postproceduralna njega bolesnika nakon ugradnje umjetnog pulmonalnog *Melody* zalistka

### Preparation and post-procedural care of patients after installation of an artificial pulmonary *Melody* valve

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Brojni bolesnici s prirođenim srčanim greškama imaju disfunkcionalni pulmonalni zalistak koji zahtjeva kardiokirurško liječenje u ranoj životnoj dobi. Do posljednjeg desetljeća zamjena neispravnog pulmonalnog zalistka ili provodnika mogla se obavljati samo operacijama na otvorenom srcu. Uvođenje perkutane ugradnje pulmonalnog *Melody* zalistka<sup>1</sup> u naš terapijski protokol danas nudi privlačnu alternativu kirurškom postupku zamjene pulmonalnog zalistka u odabраних bolesnika. Uz pomno biranje kandidata za zamjenu pulmonalnog zalistka ovom metodom, ključnu ulogu ima preoperativna priprema, ali i postproceduralni tijek u kojem jednu od glavnih uloga u edukaciji, pripremi i pravovremenom prepoznavanju i sprečavanju po život opasnih stanja imaju medicinske sestre/tehničari, koji 24 sata skrbe o bolesnicima. Glavna prednost navedenog postupka je izbjegavanje operacija na otvorenom srcu kod bolesnika koji su često imali nekoliko prethodnih operacija, a možda zahtijevaju naknadne buduće operacije. Podaci iz mnogih studija ohrabruju, a većina bolesnika s korigiranom tetralogijom Fallot i srodnim anomalijama zahtijevat će višestruke intervencije tijekom svog života. Nemoguće je predvidjeti koja će tehnologija i alternative biti dostupne u bliskoj budućnosti. U konačnici, odgovarajuće sekvenciranje kirurške zamjene i perkutane ugradnje pulmonalnog zalistka ovisit će o pojedinačnim okolnostima, no bez obzira na to, PPVI (eng. *Percutaneous Pulmonary Valve Implantation*) u svrhu produljenja funkcijskog vijeka bioprotetskog zalistka bit će važan dio liječenja.

Numerous patients with congenital heart diseases have a dysfunctional pulmonary valve and require cardiac surgery at an early age. Until the last decade, the replacement of a dysfunctional pulmonary valve or conduit could only be performed by open heart surgery. The introduction of percutaneous *Melody* pulmonary valve<sup>1</sup> implantation into our therapeutic protocol today, offers an attractive alternative to the surgical procedure of pulmonary valve replacement in carefully selected patients. The nursing staff who cares 24 hours for these patients, plays the key role in the preoperative patient preparation and in the post-procedural course and education. The main advantage of this procedure is the avoidance of open heart surgery in patients who already had several previous surgeries and may need future ones. The findings of many studies are encouraging and most patients with corrected tetralogy of Fallot and related anomalies will require multiple lifelong interventions, and it is impossible to predict what technology and alternatives will be available in the future. Ultimately, appropriate sequencing of surgical replacement and percutaneous pulmonary valve implantation will depend on individual patients' needs. Despite this, PPVI (*Percutaneous Pulmonary Valve Implantation*) is now recognized as an important part of therapy to prolong the lifespan of an existing bioprosthetic valve.

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#### LITERATURE

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