

## MP3-18

### Lower ministernotomy, a safe alternative for the repair of congenital heart diseases.

Garcia-Vieites M.(1), Lozano-Balseiro M.(2), Rueda-Nuñez F.(2), Portela-Torron F.(1), Cuenca-Castillo J.J.(1), Bautista-Hernandez V. (1).

(1) Complejo Hospitalario Universitario A Coruña. Cardiovascular Surgery. A Coruña. Spain. (2) Complejo Hospitalario Universitario A Coruña. Pediatric Cardiology. A Coruña. Spain.

#### Introduction:

Lower ministernotomy represents a minimally invasive surgical technique which has been utilized for the repair of a wide variety of congenital heart defects with excellent surgical and cosmetic outcomes. The aim of our study is to report our results with lower ministernotomy for the repair of congenital heart diseases.

Methods: From January 2010 through November 2016, 156 consecutive congenital patients (122 pediatric (78,2%)) underwent lower ministernotomy approach at our center. We analyzed in-hospital and follow-up outcomes.

Results: Median age at the time of surgery was 3,42 years (range from 3 months to 79 years). 122 patients (78,2%) were pediatric and 92 female(58,97%). Operative techniques were atrial septal defect closure(n=93(59,61%), atrial septal defect closure with tricuspid annuloplasty(n=6(3,84%)), sinus venosus septal defect repair (n=5(3,2%)) ventricular septal defect repair (n=37(23,71%)), and atrioventricular canal repair (n=14(8,97%)). There were no deaths or major in-hospital complications. Cardiopulmonary bypass and cross clamp times were 57,14±19,57 and 32,10±13,92, respectively. 149 patients were extubated in the first eight hours (95,51%). 3 patients required conversion to full median sternotomy(1,92%), 2 adults and one pediatric patient, both were successfully corrected and discharged home without any complications. There was no AV block in our study. For a medium follow up of 13 months (range from 1 month to 64 months) there were no deaths, reinterventions or reoperations and no significant significant residual defects were found.

Conclusions: At our center lower ministernotomy represents a safe alternative for the repair of congenital heart defects in pediatric and adult populations. Lower ministernotomy should become the technique of choice for these populations.

	Paediatric population N=122	Adult population N=34
Age	3,75±3,73	45,20±14,32
Patology		
OS ASD	71(58,19%)	22(64,7%)
OS ASD+TR	0	6(17,6%)
VSD	35(28,68%)	2(5,8%)
AVC	12(9,8%)	2(5,8%)
SV ASD	4(3,27%)	1(3,1%)
Early extubation	117(95,9%)	32(94,11%)
Conversion to full sternotomy	1(0,8%)	2(5,8%)
Pleural effusion	5(4,1%)	1(2,9%)
Pericardial effusion	2(1,6%)	0
AV block	0	0
Postoperative AF	1(0,8%)	9(26,47%)
Media ICU stay (days)	2±1,19	3±4,19
Media postoperative in-hospital stay	3,25±1,51	4,14±1,90

Pre and postoperative data divided into adult and paediatric population.