

Surgical outcomes and quality of life after aortic surgery in octogenarians

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Introduction

- **Considering longer life expectancy of the population, octogenarians represent a new challenge in aortic surgery.**
- **Aortic surgery in elderly patients is associated with high rates of postoperative morbidity and mortality.**
- **Considering the current pressure on the health system and the limited hospital resources, offering major aortic surgery to this group of patients remains controversial.**
- **One of the main preconceptions of aortic surgery in octogenarians is the expected poor quality of life after surgery.**

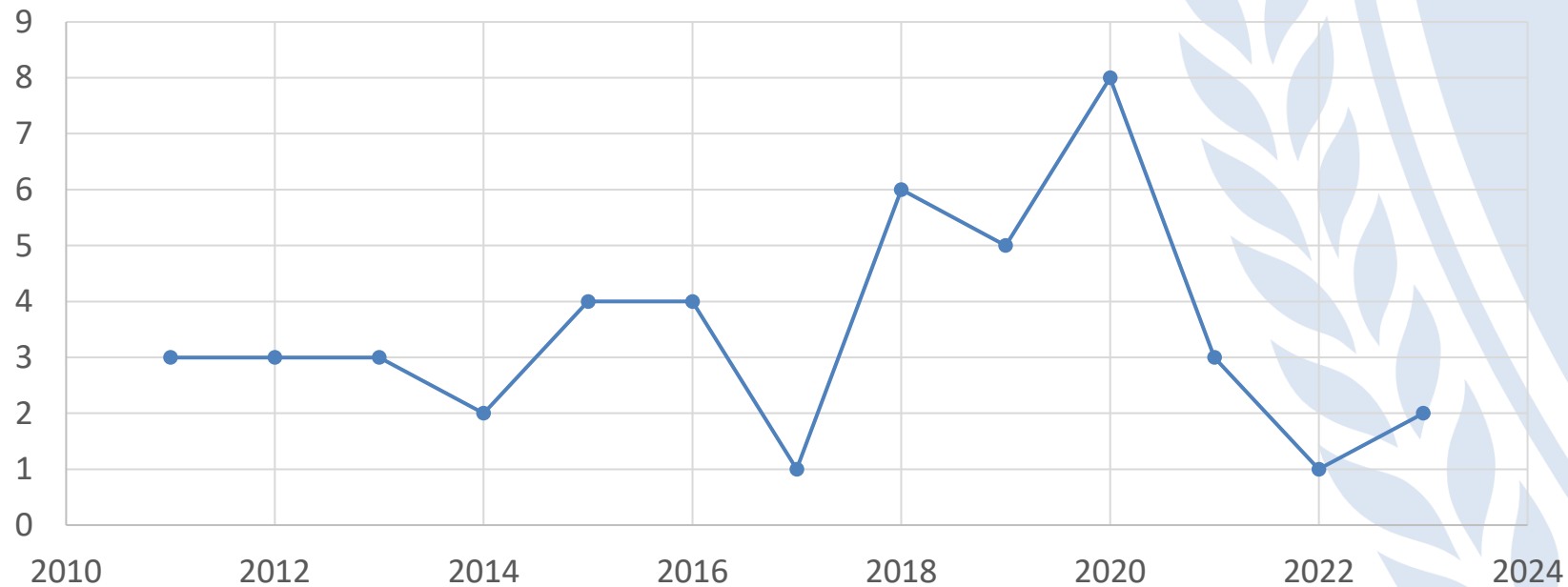
Methods

- **We prospectively collected data of 800 consecutive patients who underwent major aortic surgery between 2011 and 2023: forty-five patients (5.6%) were octogenarians.**
- **The median age was 82 years (range 80-87 years).**
- **Preoperative, operative, postoperative and follow-up data were prospectively collected in our hospital database**
- **Quality of life at follow-up was assessed through a telephone questionnaire**

Results

<u>Preoperative data</u>	-
▪ Age, mean (SD) y	82.3 (1.7)
▪ Gender, (M:F)	22:23
▪ Body surface area, mean (SD)	1.78 (0.21)
▪ BMI, mean (SD)	25.8 (3.6)

Trend by year



Results

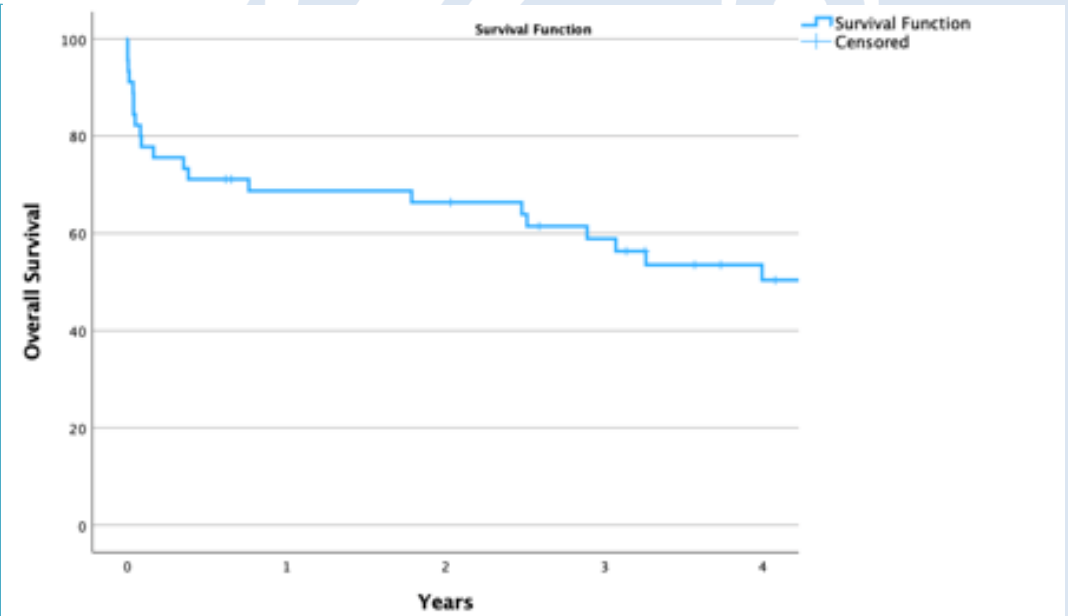
Operative data	45 patients
▪ EuroSCORE, mean (SD) %	14.78 (12.88)
▪ Urgent/ Emergency Procedure, n (%)	22 (48.9%)
▪ Re-do, n (%)	2 (4.4%)
LV Ejection Fraction (LVEF) , n (%)	
➤ Good LV	37 (82.2%)
➤ Moderate LVSD	4 (8.9%)
➤ Severe LVSD	4 (8.9%)
▪ Serum creatinine >110 umol/L, n (%)	8 (17.8%)
▪ NYHA ≥ 3 , n (%)	17 (37.7%)
▪ CCS ≥ 3 , n (%)	10 (22.2%)
• Indications n (%)	
➤ Aneurysm	22 (48.9%)
➤ Acute aortic syndrome	10 (22.2%)
➤ Chronic aortic syndrome	3 (6.7%)
➤ Other (patch repair of ascending aorta/aortic root, aortic endarterectomy)	10 (22.2%)
Concomitant aortic valve disease n (%)	
➤ AS ≥ 3	12 (26.6%)
➤ AR ≥ 3	8 (17.7%)

Results

<u>Operative data</u>	<u>45 patients</u>
Concomitant procedure n (%)	
➤ Aortic valve procedure (Replacement/Repair)	36 (80%)
➤ CABG	9 (20%)
➤ Mitral surgery	2 (4.4%)
2 Consultant operation n (%)	18 (40%)
Surgery performed by Aortic surgeon n (%)	30 (67%)
• Aortic segment operated n (%)	
➤ Aortic root	5 (11.1%)
➤ Ascending aorta	37 (82.2%)
➤ Aortic arch	9 (20%)
Requiring circulatory arrest n (%)	15 (33%)
➤ With ACP	7 (15.5%)
➤ Without ACP	8 (17.7%)

Surgical Outcomes

Postoperative Outcomes	45 patients
<ul style="list-style-type: none"> ▪ IH Mortality, n (%) <ul style="list-style-type: none"> ○ Aneurysm 5 (11.1%) ○ Acute aortic syndrome 3 (6.6%) ○ Chronic aortic syndrome 0 (0%) ○ Other (patch repair of ascending aorta/aortic root, aortic endarterectomy) 4 (8.8%) 	
▪ LOS, mean (SD) days	21.3 (24.3)
▪ Post-op CVA (CT), n (%)	5 (11.1%)
▪ Average surveillance	3.3years



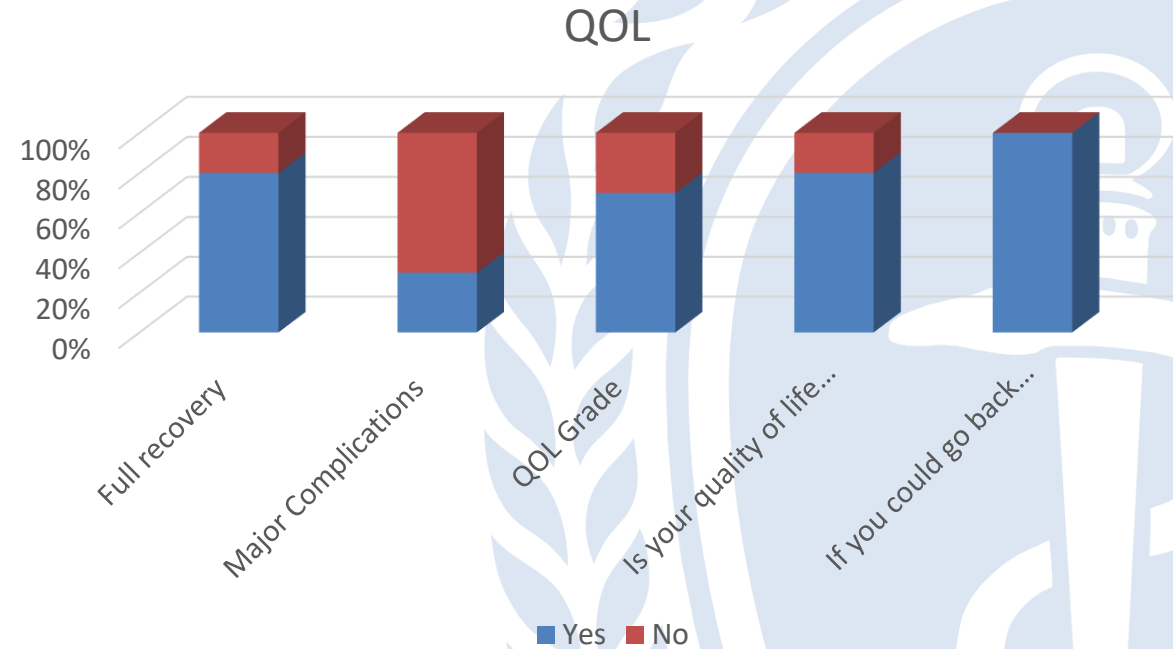
In-hospital mortality was 26.6% and average length of hospital stay 21 days (range 7-139 days).

Overall survival at 1 and 3 years was 64.4% and 51.1%.

Quality of Life

15 patients were alive at the time of QOL assessment

10/15 completed the questionnaire



<u>Quality of life self-assessment</u>	<u>10 patients</u>
▪ Are you fully recovered after surgery (Y/N)?	YES 80%
▪ Did you have any major complications after surgery (Y/N)?	Yes <20%
• How would you grade your QOL (1 to 5) %	70% of patients had QOL \geq 4
▪ How is your QOL compared to prior surgery (same, better, worst)	80% either the same or better
▪ Would you go for your surgery (if back in time) %	100% would do

Conclusions

- **Octogenarians undergoing aortic surgery have high incidence of post-operative complications with 26.6% mortality and 11% stroke.**
- **Despite high peri-operative mortality, the late survival was encouraging with a 3 years survival rate of 51.1%.**
- **The patients who survived aortic surgery maintained a good quality of life.**
- **All the patients who completed the QOL questionnaire would have the aortic surgery again if they had the opportunity to go back in time**