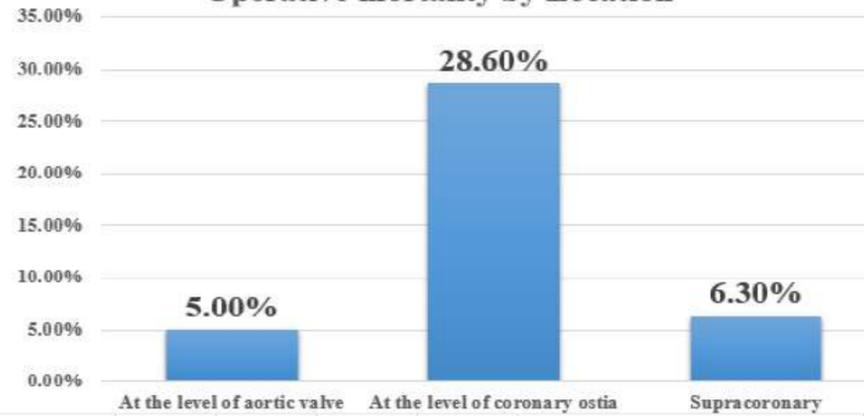


Introduction

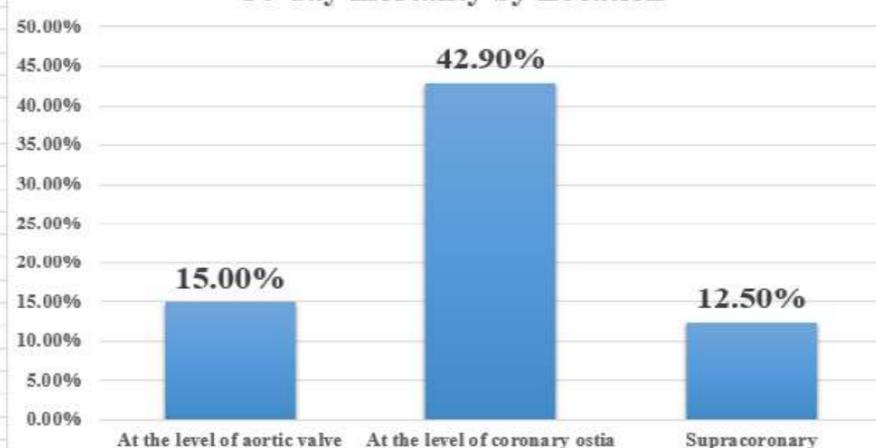
Acute type A aortic dissection remains one of the most challenging condition in cardiothoracic surgery with associated high rate of postoperative mortality and morbidity despite the adoption of techniques to improve outcome. The purpose of this retrospective study was to assess early outcome of the surgical treatment of acute type A aortic dissection, in terms of mortality and morbidity. Included in our study were 45 patients, who underwent primary ascending aortic surgery with varying methods of operation.

Procedure	Bentall	
	Number	Percentage
30 day mortality	7	25.90%
Operative mortality	3	11.10%
Bleeding	10	37.00%
Sternal infection	1	3.70%
Stroke	6	22.20%
ARDS	2	7.40%
GI complications	2	7.40%
Renal failure	2	7.40%
Pneumonia	1	3.70%
Total ICU stay days	5	3
Mechanical ventilator(hour)	23	19
Hospital Stay days	18	26

Operative mortality by Location



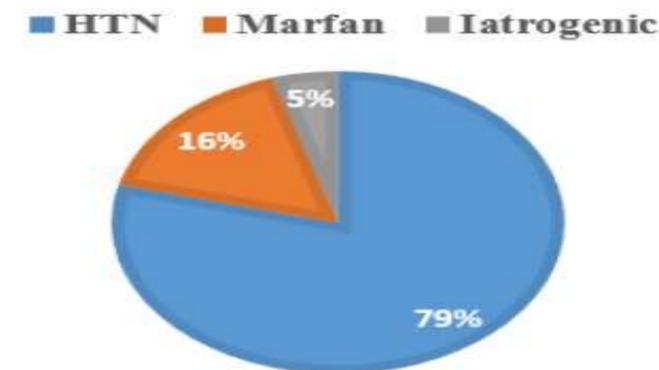
30-day mortality by Location



Methods

All consecutive patients with type A aortic dissection admitted to King Fahad Medical City, between the years 2008-2021 were enrolled. In-hospital outcomes including mortality and morbidities were assessed as well as the local etiologies and risk factors among these patients. Our investigation also included the pathological differences, where mentioned the extent of the primary tear and the different operative techniques used.

ETIOLOGY



Results

Forty-five consecutive patients with acute type A aortic dissection treated surgically were enrolled. Their mean age was 46 years (± 13) and majority were male (90.7%). High burden of hypertension (76.7%) and tobacco use (48.8%) were noted. Eight patients (18.8%) had Marfan syndrome. Primary tear (injury) was at the level aortic valve, supra-coronary or at the level coronary ostia in 46.5 %, 37.2% and 16.3% of the cases, respectively . The operative mortality as per the location of primary tear , was 5%, 6.30% and 28.60% respectively. Bentall procedure was the predominant modality of repair in 62.8% and had almost the same ICU length of stay as other procedure which was around 4-5 days. Post-operative stroke complications were stroke (22.2%), ARDS(7.4%), pneumonia(3.7%), renal failure(7.4%) and gastrointestinal complication(7.4%).The in-hospital mortality rate including operative death was 25.9%.

Conclusion

Early survival outcome after repair of acute type a aortic dissection has progressively improved over the years; with noticeable changes associated in the perioperative management of such patients.

