Introduction

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A true aneurysm is an dilatation of an artery to more than twice normal size, with stretching and thining of all vessel wall layers(e.g. atherosclerotic aneurysm). On the circulation, this type of enlargement causes weakening of the wall of the artery and potential for rupture or clot formation. Once an aneurysm reaches a certain size, the risk of rupture exceeds the risk of elective repair. When an aortic aneurysm partially in the chest and partially in the abdomen, theses are termed thoracoabdominal aneurysm (TAAA). ***(UCLA surgery 2004).***

Anuerysmal disease has been increasing during the past 30 years as population survives to an older age. This increase represents a true growth in disease incidence, rather than an artefact of more widely available screening or increasing volumes of vascular surgery.

(Bengtsson H et al., 1992).

Management of patients with TAAA remains challenging task as it involves replacement of the aorta in those areas where major arterial branches supply vital organs. Hemorrhagic shock, cardiac arrest and multisystem organ failures are the most frequent causes of death, and paraplegia and renal failure are the most devastating complications. ***(Gloviczki P. 2004).***

Traditional (conventional or open) aneurysm repair replaces a diseased segment of aorta with an interposition graft, This requires thoracoabdominal aortic exposure, aortic clamping and aortotomy.

(Perkins et al., 1998).

The technique of endovascular repair of TAAA is simple and in comparison to conventional open aneurysm surgery, if there are no

serious, specific, unavoidable complications, the potential advantages are enormous. ***(Chuter et al., 2001).***

Nawa et al in 2004 stated that endovascular stent graft repair for TAAA is less invasive, leading to reduction in the incidence of postoperative organ failure in high-risk patients.

Furthermore, the combined endovascular and surgical approach without cross clamping of the aorta and with minimized ischemia time for visceral arteries, seems to be the appropriate strategy for high risk and previously operated, with thoracoabdominal trans-diaphragmatic approach patients. ***(Kotsis T et al., 2003).***

Patients with TAAA are known to have a high prevalence of comorbidity. An analysis of the different causes of early postoperative death after repair of a TAAA showed that a cardiac aetiology was responsible for approximately 40% of early postoperative mortality. Furthermore, the presence of chronic renal failure, coronary artery disease, chronic obstructive pulmonary disease, hypertension, or diabetes were all found to be predictive causes of early postoperative death in patients with either nondissecting or dissecting TAAA undergoing surgical repair.***(Panneton and Hollier,1995)a,b.***

Aim of work

Management of patients with TAAA remains a challenging task; it has undergone an evolutionary process.

Our aim of work is to review the literature on epidemiology, pathophysiology, management of TAAA.