
INTRODUCTION

Trauma is a major health and social problem and is the main cause of death in people up to the age of 38 years. Fewer than 10% of patients with polytrauma have associated vascular injuries, but these injuries can cause significant morbidity and mortality. The incidence and type of vascular trauma differ between various societies. In most European countries today the majority of vascular trauma is caused by blunt (traffic accidents) and iatrogenic injuries. In south Africa and the USA, injuries are mostly penetrating and have also changed from predominately stab wounds to injuries caused by firearms. A clear understanding of the pathophysiology of vascular trauma and a logical approach to the management of those injuries are essential for a favourable outcome. **(Fingerhut A et al.,2002)**

Classically, injury mechanisms are divided into penetrating or blunt type. Following blunt trauma, tissue injury is produced by local compression or rapid deceleration. In penetrating trauma, the injury is produced by crushing and separation of tissues along the path of the penetrating object **(Hoyt & Coimbra,2001)**

The management and outcome of vascular repair has remarkably improved over past decade due to, better understanding of the trauma mechanism, early detection of the nature and extent of vascular injury and speedy surgical intervention aiming to revascularization **(Hafez et al., 2001)**.

Vascular reconstruction is carried out by different means and ways depending upon the nature and extent of vascular injury, size and caliber of injured vessel, its area of supply, nature of concurrent trauma, general condition of the patient and available resources including expert vascular

services. In modern days surgeries, 95% limbs are successfully salvaged by early surgical intervention and revascularization (**Hafez et al.,2001**).

The continued advances in imaging and stent-graft (SG) technology have considerably expanded the indications for endovascular approach in vascular trauma, with the potential advantage of avoiding part of the challenging problems of conventional repair (**Nicholson, 2004**).

However, the use of intra-luminal arterial stents in peripheral vessels has been described in the treatment of angioplasty induced or penetrating injuries, but their use in the management of blunt trauma has rarely been reported (**Carillo et al., 2002**).