Introduction

Arterial aneurysms are local out-pouching of a blood vessel wall. The pathogenesis of intracranial aneurysms formation (IAs) and rupture is not well defined (Kornienko et al., 2009).

Different types of intracranial aneurysms include 3 general categories, saccular (berry) aneurysms, fusiform aneurysms and dissecting aneurysms. Other less common types include, mycotic, traumatic and oncotic aneurysms (Hacein et al., 2011 & Brisman et al., 2006).

The aneurysms were classified according to the size as giant aneurysms (> 25 mm), large aneurysms (13–25 mm), medium aneurysms (7–12 mm), small aneurysms (3–6 mm), and very small aneurysms ≤ 3 mm (Le Roux et al., 2004).

Cerebral aneurysms may present with subarachnoid haemorrhage (SAH), mass effect or are discovered incidentally. Digital subtraction angiography (DSA) has been the “gold standard” for many vascular and cerebrovascular imaging studies (Yoona et al., 2007).

Some investigators claim that computed tomographic (CT) angiography can presently replace DSA, as the most reliable means to detect intracranial aneurysms in SAH (Hang et al., 2010).

Two methods of treatment are available—neurosurgery and, since the introduction of the platinum Guglielimi (electrolytically) detachable coil (GDC) in 1990, endovascular treatment has become increasingly accepted and has been applied to a growing fraction of patients (Murayama et al., 2003).
After the International Subarachnoid Aneurysmal Trial (ISAT), the first multicenter randomized study on endovascular coiling, the method has grown up to be the main treatment modality for aneurysm treatment (Molyneux et al., 2005).

Since ISAT, there have been many modifications in device technology aiming to achieve safer, more durable treatment of a larger proportion of aneurysms, particularly those with a relatively wide neck where more complete occlusion is more difficult and coil compaction and recanalisation more common (Pierot et al., 2009).