Chapter 9

GENERAL INFORMAITON ABOUT ANEURYSMAL SUBARACHNOID HEMORRHAGE: LITERATURAL REVIEW

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1. INTRODUCTION

Subarachnoid hemorrhage (SAH) is a devastating disease and is associated with high mortal- ity and poor outcomes among survivors, management by multidisciplinary team is associated with improved outcomes; however, intensive care management presents big challenge. Most of spontaneous SAH is due to the rupture of saccular aneurysm, the prevalence of intracranial saccular aneurysm by radiographic and autopsy series is 5%, about 20–30% of patients have several aneurysms [1]. Aneurysmal SAH (aSAH) occurs at a rate of 2–16 per 100,000 population, mostly occurring between 40 and 60 years of age; however, young children and elderly can be affected. The incidence of SAH is higher in women than men, which may be due to hormonal status. African Americans are at a higher risk of SAH than Caucasian Americans. Mortality rate is about 60% within first 6 months [2, 3].

2. CIRCLE OF WILLIS

The circle of Willis is an anastomotic structure. It is formed when the internal carotid artery enters the cranial cavity bilaterally and divides into the anterior cerebral artery and middle cerebral artery, and the anterior cerebral arteries are then united by an anterior communi- cating artery. These anastomoses form the anterior half of the circle (anterior circulation). Posteriorly, the basilar artery branches to give left and right posterior cerebral artery (poste- rior circulation). Posterior cerebral arteries join the internal carotid system anteriorly to com- plete the circle via posterior communicating arteries.

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