

INTRODUCTION

Congenital heart disease (CHD) occurs in approximately 8/1000 live births. Among infants born with cardiac defects there is a spectrum of severity, about 2-3/1000 infants with CHD will be symptomatic in the first year of life (*Keith, 1998*).

Ventricular septal defect (VSD) is a congenital acyanotic heart disease with increased pulmonary blood flow and volume load, it is a congenital defect of the interventricular septum allowing free communication between the ventricular chambers (*Soto et al., 2000*).

Defects in the interventricular septum in a wide variety of size, shape & position, they range from very small defects in the muscular septum to absence of the interventricular septum. Ventricular septal defect (VSD) is the most common cardiac malformation accounting for 25-30% of congenital heart disease (*Hoffman, 1999*).

The commonest type is formed in the central fibrous body and the aortic valves, these defects are perimembranous defect (defects around membranous septum). The second most common type of VSD is muscular defects, that can be found in different parts of muscular septum. The last type of VSD is doubly committed defects and these defects are found in the ventricular outflow tracts and are sub-pulmonary and also sub- aortic (*Nasr et al., 1999*).

One of the complications of isolated ventricular septal defect that may cause death before the age of 40 years is the development of aortic regurgitation. The sequence of diagnostic investigations applicable to



patients with congenital heart diseases in general and ventricular septal defects in particular can be divided into 3 successive stages.

The first is clinical history and physical examination.

The second stage consists of radiography and echocardiography.

Echocardiography a non- invasive technique is becoming established in the diagnostic process.

The third stage in the process consists of cardiac catheterization and angiography to provide detailed information (*Anderson et al., 1996*).