

# INTRODUCTION

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Gall stone disease is a major public health problem in developed countries. For example in the United States, it is estimated that 20 million people have gall stones with 500.000 cholecystectomies being performed and approximately 10.000 deaths per year related to this disease (Sali, 1990).

Gall stone disease has a significant impact on health care, costs in terms of demands on medical personnel and utilization of health care facilities (Low-Beer, 1985).

Gall stone disease occurs in approximately 10% of adults and in about 20% of persons over the age of 40. Thus cholelithiasis is one of the most common health problems of adult life (Bouchier et al., 1984). A post mortem study by Vitetta and Sali (1988) has shown a gall stone incidence in females of approximately 50%.

Gall stones have occurred over since the days of primitive man. The ancient Egyptians found them in their dead bodies and the mummy of the priestess Amene of XXI dynasty (1500 B.C.) with her gall stones was presented to the Royal College of Surgeons by Sir. Elliot Smith in 1909 (El-Awady, 1970).

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For almost 150 years, stasis, obstruction and inflammation were known as aetiologic mechanisms in cholelithiasis but these now could not explain the overall process of gall stone formation (Small, 1980).

Available evidence suggests that the incidence of gall stones has been rising sharply in the recent decades (Gilat et al., 1983) and it is not known whether a plateau has been reached. Much has been learned in recent years about factors in bile associated with cholesterol gall stone formation, however the reasons for the rising incidence of gall stones remain unknown. Epidemiologic data suggest that environmental factors (diet, in particular) may be important (Bennion and Grundy, 1978). Many other risk factors are documented such as the female sex, older age, ethnic group, obesity, hypercholesterolaemia, diabetes, liver disease, haemolysis, ileal disease or resection, drugs in particular oral contraceptives clofibrate and cholestyramine and a positive family history (Gilat et al., 1983; Bouchier et al., 1984 and Sheen and Liaw, 1989).

During the last 20 years, our understanding of gall stone formation has been greatly enhanced; shock wave fragmentation, stone dissolution has become possible, but more information is needed on the prevention of this disease before it can be adequately controlled.

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