Current Status in the Surgical Management of Adult Polycystic Liver Disease

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Abstract

Introduction: In patients with adult polycystic liver disease (APLD), there is considerable debate surrounding the most effective way of managing symptomatic cysts. Conservative approaches like percutaneous aspiration or cyst fenestration are associated with low morbidity but high recurrence rates. Conversely, liver resection and hepatectomy with orthotopic liver transplantation is drastic and associated with high morbidity and mortality rates. Our aim is to review the current understanding of liver cystogenesis in these patients and the therapeutic options available in order to provide a rationale guide to management of this intriguing condition.

Methods: This article summarises the findings of published papers in major international journals indexed on MEDLINE on APLD using the key words – adult polycystic liver disease, liver cysts, fenestration, liver resection, liver transplantation and polycystic kidney disease. The period of search includes papers between 1965 and 2000.

Results: Published studies have suggested a ‘two-hit’ hypothesis to explain the development of liver cysts in patients with APLD. This will provide the rationale for future management. Meanwhile, the indications, pitfalls and results of the various therapeutic options are reviewed. Management of symptoms has to be tailored to the underlying severity of the liver cystic disease, co-morbidity and procedural risks and recurrence rates.

Conclusion: Good long-term relief of symptoms can be achieved with the correct procedure at acceptable morbidity and mortality rates. We have provided guidelines on the various options available to enable a structured approach to the management of APLD.

Key words: Adult polycystic kidney disease, Fenestration, Liver cysts, Liver resection

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