OBJECTIVES: To provide an overview of the current understanding of the classification of haemolytic uraemic syndrome (HUS) and to describe the epidemiology, pathogenesis, clinical picture, renal histopathological findings, treatment and prevention of shiga toxin (Stx)-associated HUS, the most common type of HUS and; to compare and contrast features of idiopathic (atypical) HUS and inherited HUS with those of Stx-associated HUS. DATA SOURCE: A literature review was performed of major published series between 1989 and 1998 inclusive, using the Index Medicus and MEDLINE search. Some earlier published series were also reviewed in instances where they indirectly led to the current studies or reported on rarer organ involvements in HUS. STUDY SELECTION: Data and opinions from twelve general reviews of HUS, twelve on aetiology and classification, twelve on clinical features, eight on pathogenesis and nine on treatment and prognosis are summarised. CONCLUSION: HUS is a thrombotic microangiopathy with several aetiologies currently thought to play a role. Vascular endothelial cell injury appears to be central to the pathogenesis of all forms of HUS, although the triggering factors may be different and not well understood in some cases. In HUS, supportive therapy is of paramount importance. Reported specific therapies do not have sufficient evidence to support them. Prevention of HUS is possible in Stx-associated form, but not in the others. In patients who go on to develop end-stage renal failure, transplantation is possible, but recurrence rates are high in forms other than those which are Stx-associated. Persisting sequelae in other organs in HUS are infrequent.