Background: Gallstones are present in approximately 10% to 15% of the adult Western population with 1% to 4% of patients becoming symptomatic each year. Laparoscopic cholecystectomy for acute cholecystitis is usually performed after the acute cholecystitis episode settles because of the perceived fear of higher morbidity and of need for conversion from laparoscopic to open cholecystectomy. However, delaying surgery may expose the individual to gallstone-related complications.

Aims & objectives: To compare early laparoscopic cholecystectomy, defined as less than seven days of clinical presentation with acute cholecystitis, versus delayed laparoscopic cholecystectomy more than six weeks after index admission and conservative treatment for acute cholecystitis.

Search Criteria: Clinical databases were searched for suitable studies. Randomised and non-randomised clinical trials comparing early versus delayed laparoscopic cholecystectomy in participants with acute cholecystitis published after 1994 were included.

Results: 16 studies were identified for this review and the outcomes measured were operation time, conversion to open surgery, postoperative complication, post operative pain and analgesia use, length of hospital stay, and duration of antibiotic therapy. For all but one of the criteria it has been found that early and delayed laparoscopic surgery were equivalent for these end points. The endpoint antibiotic duration post-surgery still remains an area of contention.

Conclusion: Early and delayed cholecystectomy for the treatment of uncomplicated acute cholecystitis is both safe and feasible. Early laparoscopic cholecystectomy is preferred over delayed laparoscopic cholecystectomy mainly because of decreased length of hospital stay in the early laparoscopic cholecystectomy group. This is a clear advantage.