Laparoscopic cholecystectomy has become the “gold standard” surgical technique for the removal of a gall bladder, and was introduced in the late 1980's, to supercede the “open” approach. Numerous randomised control studies have proven that the laparoscopic procedure is associated with less pain, a shorter recovery and improved cosmesis than the “open” technique. Laparoscopic cholecystectomy involves multiple small incisions for the insertion of ports, to facilitate access to the peritoneal cavity and to perform the necessary dissection and remove the gall bladder. Surgeons have subsequently further minimalised the laparoscopic technique by introducing thinner ports and instruments, and the standards of surgical practise continue to progress towards less invasive procedures. The single-incision laparoscopic cholecystectomy (SLC) was first reported in 1996. Scientific studies have failed to show a benefit in the procedure compared to the multi-incision approach (MLC).

The current multi-centre RCT was conducted in three hospitals in Denmark. The intention of the study was to evaluate the effect of SLC versus conventional MLC with regard to postoperative pain experienced by the patient. A composite measure across time was applied considering a scoring system at 3 hours, 1, 2 and 3 days after the surgery.

The results showed that there was no difference in the post operative pain experienced with the two procedures. The operating time was 30 minutes longer on average with the SLC, and there was a single significant complication, which occurred in a patient undergoing an SLC procedure. This was a leaking cystic duct, requiring a post operative ERCP.

Dr Currer’s comments: There are more than 13 randomised control studies which have been published on the procedure of SLC. The potential benefit of SLC with regard to cosmesis and possible reduction in post operative pain, is outweighed by a slightly increased risk of the procedure. In Dr Currer’s opinion, the multi port approach is proven, safe, and there has been no reason shown to modify this technique.