

GUIDELINES FOR THE MANAGEMENT OF BILE DUCT STONES

There are various ways of managing bile duct stones with the two main variables that determine management being the mode of presentation and local expertise/ preference. Whilst it is therefore difficult to be prescriptive about the management of duct stones, there are guiding principles.

1. Bile duct stones are suspected pre-operatively

If there is a suspicion that the patient may have a stone in the bile duct, a decision needs to be made as to whether the stone should be removed pre-operatively or intra-operatively (not post-operatively).

If the decision is to remove the stone pre-operatively by Endoscopic Retrograde Cholangiopancreatography (ERCP) in some patients it is advisable to confirm the presence of the stone by Magnetic Resonance Cholangiopancreatography (MRCP). This applies particularly if the evidence for a bile duct stone is equivocal.

Patients with malignant obstruction of the bile duct frequently have co-existent gallstones. Those patients therefore presenting with jaundice should have the cause of the jaundice established before surgery.

Where a diagnosis of bile duct stones is made pre-operatively and the decision to remove them intra-operatively facilities and expertise to perform that laparoscopically should ideally be available.

Without entering the debate relating to routine operative cholangiography versus selective cholangiography, operative cholangiogram facilities should always be available at cholecystectomy. If the surgeon does not perform routine operative cholangiograms, then at least his indication for performing an operative cholangiogram should be liberal, eg. slightly abnormal LFT's, mildly dilated duct on ultrasound, past history of acute pancreatitis.

2. Unsuspected duct stone discovered at operation

If an unsuspected duct stone is diagnosed at operation, removal of the stone by either laparoscopic or open exploration or post-operatively at ERCP, are acceptable alternatives.

Summary

1. Common bile duct stones diagnosed pre-operatively should be dealt with either pre-operatively or intra-operatively. A decision to leave the stones for post-operative ERCP extraction is unacceptable.
2. Jaundiced patients should have a firm diagnosis established before surgery.
3. MRCP is a very useful and safe method of imaging the biliary tree. Where MRCP is unavailable, CT cholangiography is an alternative.
4. If operative cholangiography is performed selectively rather than routinely the indications for it should be liberal.

5. Unsuspected bile duct stones diagnosed intra-operatively may either be dealt with at surgery or by ERCP post-operatively. ERCP is facilitated by the insertion at operation of a transcystic biliary stent. Of course ERCP may not be possible in patients who have had previous gastric surgery.

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