Laparoscopic Cholecystectomy and the need for Routine Group & Save

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Background and Standard
The maximum blood ordering schedule within our trust states that all patients undergoing Laparoscopic Cholecystectomy should have a group and save (G+S) sample taken in pre-assessment clinic. Those who have antibodies detected require blood to be ordered. Furthermore, those patients undergoing surgery at the peripheral hospital, which is situated 25 miles from the blood bank, should have a G+S performed within seven days of their surgery. Lack of valid G+S samples has resulted in delays to the start of theatre lists and cancellation of elective Laparoscopic Cholecystectomies at the peripheral hospital. In addition to this there is a cost to the trust to transport the urgent repeated samples to the lab on the day of surgery via taxi.

Initial Audit

Aims of initial audit: To establish if we are meeting the current standard, and to assess if a valid G+S is necessary for those patients undergoing surgery at the peripheral hospital.

Methods: All patients who underwent cholecystectomy within our trust over a one year period were retrospectively reviewed. The trust’s electronic patient records database was interrogated to review whether the patient underwent their surgery at the main hospital or peripheral hospital. In addition to this we looked to see if the patients had a G+S sample taken within 16 weeks prior to surgery, how many patients had blood requested, and whether this blood was used.

Initial Audit Results:
- 731 Cholecystectomies were performed.
- 89% were elective operations with 44% of these performed at the peripheral hospital.
- 13% of these patients did not have a G+S sample prior to admission.
- 49 G+S samples on 35 separate days had to be transported from the peripheral hospital on the morning of surgery.
- Of the 731 cholecystectomies performed, 15 patients (2%) had blood ordered for reasons other than abnormal antibodies.
- 6 patients (0.8%) received a blood transfusion as a result of a simple cholecystectomy and only 1 patient (0.1%) received blood intra-operatively.

Implementation of a change

A new policy was implemented in November 2014. This policy now requires a G+S sample to be taken in pre-assessment clinic only, both for the main hospital and the peripheral hospital. Only those patients with antibodies require a repeat G+S sample and blood to be ordered.

A re-audit was undertaken to assess whether the new policy was being adhered to, and whether there was any compromise to patient safety.

Re-Audit Results
- 215 cholecystectomies were performed over a 4 month period.
- 41% were performed at the peripheral hospital.
- Of the 215 patients, 3 (1%) had blood requested within 7 days of their operation.
  - 2 had a cholecystectomy as part of a much more extensive operation.
  - 1 had a low haemoglobin on admission.
- No patients required a blood transfusion as a direct result of a simple cholecystectomy.

Conclusions

Laparoscopic Cholecystectomy is a safe operation, and a routine valid G+S is not necessary for this day case procedure. The re-audit demonstrates no compromise to patient safety and quality of care.

Changing the hospital policy has resulted in a reduction in the number of cancelled operations and delayed starts to theatre lists at the peripheral hospital. It also saves tens of thousands of pounds each year as a result of reduction in repeat processing of blood samples, and transport costs of the G+S samples.