Audit: Morbidity and Mortality- Are we collecting the right data in our ENT patients?

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1. Standard

Royal College of Surgeons Guidelines suggest the following data should be collected for discussion of cases at morbidity and mortality (M+M) meetings:

- Age
- Co-morbid
- Previous Ix (if appropriate)
- Admitting diagnosis
- MDT decisions (if appropriate)
- Operation
- Complication
- Details of events around the complication.

Collection of such data is integral to promoting improvement in surgical safety, quality and learning.

2. Data Collection

Data was collected retrospectively from the last 6 months from data sources including: M+M meeting records, M+M data collection templates, M+M powerpoint presentations.

Inclusion criteria:
Intra-operative complications
Surgical inpatient deaths
Returns to theatre.
Never events
Patients whose discharge was delayed by complications.
Readmissions <30 days since discharge.
Other “major importance”
Other near misses

Exclusion criteria:
Operations done at other hospitals by other surgeons not working at Stepping Hill.

3. Analysis

26 patients were included. 4 patients were excluded as these were complications from operations done at other hospitals. Poor recording of co-morbidities was noted (9.1%). But this is important to record as hypertension and anti-coagulants are significant risk factors to the common complication of bleeding.

4. Intervention: Data Collection Tool

We created an updated data collection tool using an Excel spreadsheet. This contained additional and compulsory columns: co-morbid, operation date, details of adverse event (and grading), and details of management plan.

4a. Excel data collection tool:

A	B	C	D	E
Number	Month entered	Sex	AGE (YRS)	Co-morbid
EXAMPLE	January			
1				
	February			
2				
3				

F	G	H	I	J
OPERATIVE / ADMISSION DETAILS				
PROCEDURE	INDICATION	DATE	Primary surgeon	CONSULTANT

K	L	M	N	O	P
COMPLICATION 1					
COMPLICATION	DETAILS	GRADE	JUSTIFIED	ERROR	PLAN

4b. Keys to the data collection tool we used:

Grading	Grading of Complication				
I	Any deviation from the normal postoperative course without the need for pharmacological treatment or surgical, endoscopic, and radiological interventions Allowed therapeutic regimens are: drugs as antiemetics, antipyretics, analgetics, diuretics, electrolytes, and physiotherapy. This grade also includes wound infections opened at the bedside				
II	Requiring pharmacological treatment with drugs other than such allowed for grade I complications Blood transfusions and total parenteral nutrition are also included				
III	Requiring surgical, endoscopic or radiological intervention Grade IIIa - Intervention not under general anesthesia Grade IIIb - Intervention under general anesthesia				
IV	Life-threatening complication (including CNS complications)* requiring IC/ICU management Grade IVa Single organ dysfunction (including dialysis) Grade IVb Multiorgan dysfunction				
V	Death of a patient				

	Errors	Complication Codes	Justification
A	Patient selection	A Readmission within 30 days	A Justifiable, unavoidable, or consistent with reasonable and prudent practice given the situation or clinical data available.
B	Delayed / missed diagnosis	B Unplanned return to theatre	
C	Delay to provide treatment	C Cardiac	B Not justifiable, avoidable, not consistent with standards of practice or service.
D	Intraoperative / technical error	D Pulmonary	
E	Judgement error in patient management	E DVT / PE	Action Plan A None required – explain in comments B Tabulation and tracking of problem for further reporting C Institution of formal Q/A audit D Formulation of new policy or procedure E Modification of dept, training program F Individual counselling and discussion G Educational offering O Other inc. action pending review Multiple Please enter in free text into complication details box eg D/G
F	Equipment failure / unavailability	F Wound	
G	Drug error	G Nerve injury	
H	IV Fluid error	H Bleeding / Haematoma	
I	Blood / blood product error	I Other	
J	Personnel unavailable / delayed	J Death	
K	Inadequate patient monitoring		
L	Inadequate documentation		
M	Inadequate escalation of treatment		
N	Failure to follow established policy		
Z	No error		
Multiple	Please enter in free text into complication details box eg D/G		

5. Re-audit: Planned