Audit

Is there a need for resident general surgical cover in small peripheral hospitals?

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Aim: To assess the need for resident general surgical cover in a small peripheral hospital.

Patients and Methods: The total number of admissions to Caerphilly District Miners' Hospital in the year 2001 was noted along with the admission criterion for elective general and vascular surgical patients.

Results: Among the 10,608 in-patients only 120 (1.13%) developed general surgical/vascular problems that merited surgical referral and out of these 30 (0.28%) patients were transferred to neighbouring larger hospitals for specialist care.

Conclusions: A resident staff grade surgeon is not required in a small peripheral hospital and this service could be provided by the resident on-call surgical SpR in a neighbouring larger hospital

Key words: Resident general surgical cover – Small peripheral hospitals

High-quality surgical care requires the concentration of resources and skills into larger organisational units. Smaller hospitals serving populations of 150,000 or less need to develop protocols for admission or transfer to neighbouring larger hospitals to ensure that patients receive care not compromised by lack of skills or resources.¹

Because the emergency case-load of smaller hospitals is unlikely to be sufficient to provide adequate training and experience for higher surgical trainees in the shortened, structured training scheme, there may be a service need to replace them by staff grade surgeons.²

This study examines such a need for a resident staff grade surgeon in Caerphilly District Miners' Hospital

(CDMH) serving a population of 170,000. Its surgical department admits patients for elective minor and intermediate operations and takes referrals only from the hospital's in-patients. It has an accident and emergency department which admits emergency medical and gynaecology/obstetrics patients.

Patients and Methods

The total number of hospital admissions in the year 2001 was noted along with the admission criterion for elective general and vascular surgical patients. Pre-operatively, the surgical patients were rigorously screened in a dedicated pre-assessment anaesthetic and surgical clinic 1

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Table 1 Total admissions (10,608) to Caerphilly District Miners' Hospital in 2001

	Elective	Non-elective	Day cases	Total
General medicine	133	3659	1765	5557
General surgery	408	1	468	877
Gynaecology	592	415	714	1721
Obstetrics	—	1385	—	1385
Urology	109	5	427	541
Trauma & orthopaedics	408	1	118	527

Table 2 Distribution of general and vascular complaints requiring surgical examination and subsequent transfer to larger hospitals in 2001

Abdominal distension/intestinal obstruction	6
GIT cancer	6
Jaundice	5
Acute appendicitis	2
Peritonitis	2
Acute cholecystitis	2
Diverticulitis	2
Perforated peptic ulcer	1
Abdominal mass	1
?Strangulated inguinal hernia	1
Ischaemic leg (chronic ischaemia)	2
Ischaemic leg ulcer (chronic ischaemia)	1
Miscellaneous	1

week before admission. Most patients belonged to ASA grade 2 or lower with a very few in grade 3.

It was then determined how many of the total in-patients developed a surgical complaint that required a referral to the resident general surgical middle grade. An average of 2.5 referrals per week was found. Among these referrals, the number of patients who required specialist care and were subsequently transferred to larger neighbouring hospitals was noted. All transfer notes were analysed according to a set protocol, including the specialty to which these patients were transferred.

Results

The total number of admissions are as shown in Table 1. Among the 10,608 in-patients, only 120 (1.13%) developed general surgical/vascular problems that merited surgical referral and out of these 30 (0.28%) patients were transferred to neighbouring larger hospitals for specialist care. Their distribution is shown in Table 2.

No patients were transferred to surgical care for intractable upper gastrointestinal tract bleeding and none of the vascular patients had critical ischaemia.

Discussion

Only 30 (0.28%) patients among a total admission of 10,608 in the year 2001 in CDMH developed a surgical complaint that was severe enough to warrant transfer to neighbouring larger units. None of the original elective surgical admissions in Caerphilly developed any complication that required a transfer, largely because of the robust admission criterion. All the 30 patients who were eventually transferred to general/vascular care had originally been either medical or gynaecology/obstetrics in-patients.

As there has been more than 800 surgical admissions in one year (Table 1), it is fairly certain that elective surgical service at Caerphilly District Miners' Hospital provides a valuable source of operative training for SpRs and SHOs regarding intermediate surgery.

Conclusions

As only 120 (1.13%) patients out of a total year's admission of 10,608 required a surgical referral, it is likely that a resident staff grade surgeon is not required in a small peripheral hospital. This service could be provided by the resident on-call surgical SpR in the neighbouring larger hospital who can advise regarding further management or transfer of the patient. In addition, the on-call consultant general surgeon would be available for an expert opinion.

References

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