

Renal Colic Or Just A Pain In The Side For The Surgeon?: A Comparison Study Of General Practitioner Referrals Suggestive Of Renal Colic Under A Cross Cover System

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Abstract

With the advent of the European working time directive many hospitals are reducing junior doctors hours with cross cover between specialties. What effect does this have on patient care?

An comparison study of 74 patients referred by general practitioners (GP) with symptoms suggestive of renal colic was undertaken over a 6 month period at the Royal Gwent Hospital, Newport, South Wales. Patients were admitted either under the cross covering general surgeons or the urologists and their treatment compared.

The study shows that GPs are successful at diagnosing acute renal colic and that urologists are significantly better than the general surgeons at investigating and arranging follow up for these patients. We recommend that GPs should refer acute urological conditions to the urologists rather than a cross covering specialty.

INTRODUCTION

Many hospitals throughout Britain combine their emergency urology cover with another surgical specialty, often, general surgery. With the advent of the European Working Time Directive it will become increasingly more difficult for the smaller departments to provide independent twenty-four hour cover ¹. As a result, the junior doctors will be forced to cross cover specialties but what effect will this have on patient care ²? This audit was undertaken to assess the accuracy of General Practitioner (GP) referrals for presumed renal colic and to assess whether patients received the appropriate investigations and follow up under a cross cover system.

Acute renal colic is a common, often recurrent condition with an annual incidence of one to two cases per 1000 and a lifetime risk of 3-5% in women and 10-20% in men ^{3,4}. A typical case presents with a sudden onset of severe unilateral flank pain radiating into the groin or genitals ⁵.

At the Royal Gwent hospital in Newport, acute urology referrals are assessed by the on-call urology / ENT Senior House Officer with the exception of renal colic which is dealt with by the general surgeons. It is well documented

that symptoms suggestive of acute renal colic may represent a varied presentation of an acute surgical abdomen or a leaking abdominal aortic aneurysm ⁶. However, some recurrent cases of proven renal calculi are referred directly to the urologists.

METHODS

All GP referrals are made via a nurse practitioner and recorded in the Bed Management records at the Royal Gwent Hospital.

The Bed Management log was used to identify all patients referred with the diagnosis of possible renal colic or loin to groin pain over a six-month period from August 2003 to February 2004. (Total 74 patients).

The notes were examined and the diagnosis, investigations and follow-up were recorded.

RESULTS

During the period August 2003-February 2004, 74 patients were admitted with loin to groin pain or possible renal colic. This averages three admissions per week. 73 sets of case notes were located and appraised.

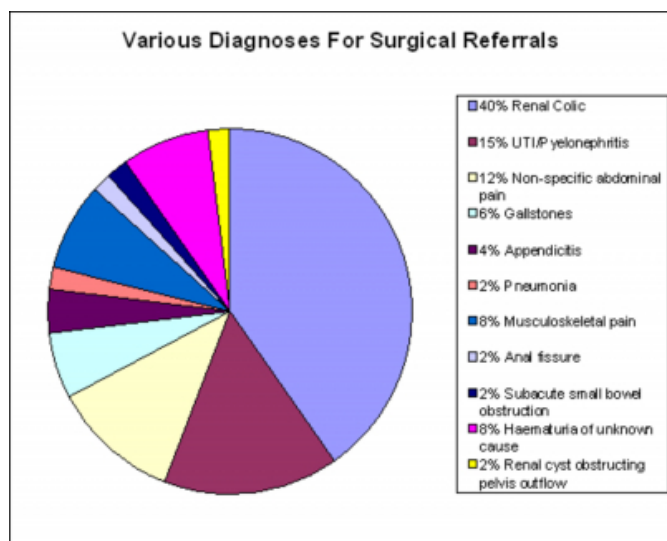
The patients were equally split 37 males and 37 females with an age range from 22years to 84 years and the median being 49 years.

The local GPs were correct in diagnosing 40 cases of renal colic out of the seventy-three cases referred (54.8%). Of the 73 cases, 52 were referred to general surgery, whilst 21 were referred to the urologists. Intra venous Urogram (IVU) was used to confirm the 40 cases of renal colic were due to calculi. (Surgery 21/52 and urology 19/21).

The 2 remaining urology referrals were: a urinary tract infection and a large renal cyst distorting the renal pelvis. Several diagnoses accounted for the remaining 31 general surgical referrals. These are illustrated in the pie chart, figure 1.

Figure 1

Figure 1



Only 18% of the referrals had a general surgical diagnosis, of which almost half were non-specific abdominal pain and received no outpatient follow up.

INVESTIGATIONS & FOLLOW UP

It is considered good practice to check the serum Calcium and Uric acid levels in patients presenting with renal colic⁷. Table 1 below, compares the urology and surgical admissions for: haematological investigations, time from admission to diagnosis of renal calculi by IVU and the subsequent outpatient follow up.

Figure 2

Table 1

	Urology (n=19)	Surgery (n=21)
Serum Calcium checked (%)	100	48
Serum Uric Acid checked (%)	95	14
Time to IVU (Days)	Mean<1, Range 0-4	Mean<1, Range 0-2
Urology Follow Up (%)	100%	76%*

*One of the surgical renal colics received a surgical out patient appointment rather than urology.

DISCUSSION

The local GPs were accurate in referring 75% of patients with urinary tract problems. Of these, 73% were diagnosed with renal calculi disease.

Patients admitted under the care of the urologists are more likely to have further investigations and follow up. Identifying the type of calculi can be helpful in tailoring treatment and preventing further episodes. A worrying pitfall in the system is the failure to fully investigate patients presenting with haematuria. A quarter of the cases of haematuria did not receive any routine investigations or follow up. Bailey & Love recommend that, 'all patients with haematuria need investigation even if they are taking anticoagulant drugs.' Standard practice should include radiographic renal tract imaging, cystoscopy, urine microscopy and urine cytology⁸. Microscopic haematuria may be the only feature of an underlying urinary tract neoplasm.

There is no significant difference between the urologists and surgeons in time to IVU and confirmation of the diagnosis of renal colic.

With the advent of the European Working Time Directive (EWTD) a variety of shifts have been designed, many of which involve cross cover between specialties, in order to deliver service. From the outset, many have expressed concerns that cross cover and reduced exposure of trainees may have a negative impact on training and patient care. One such body, the Academy of Medical Royal Colleges, stated that the aim was to maintain training objectives whilst not catastrophically reducing service delivery². However, this appears to be drifting away from the 1998 Government white paper on clinical governance which defines clinical governance as, 'A framework through which NHS organisations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in clinical care will flourish⁹.'

Politics aside, there will always be the concern for the urologist that a referred renal colic may turn out to be a leaking abdominal aortic aneurysm. Conversely, the general surgeons can argue that an infected, obstructed kidney or potential urinary neoplasm may be missed or inappropriately treated, with similar consequences.

CONCLUSION

The study shows that specialists manage, investigate and follow up their particular area of expertise more effectively than other clinicians.

Given the accuracy of the local GPs at diagnosing renal colic and since only 9.5% of the referrals had an operable surgical problem, we suggest that all patients with presumed renal colic should be admitted under the care of the urologists. However, a swift surgical review should be offered to any patient of particular concern.

This increase in workload may not always be possible, especially in departments with only one or two consultants.

The audit also highlights some of the problems associated with cross cover between specialties. There appears to be a conflict between junior doctors cross covering at night and

patients receiving the correct investigations and follow up. There is no easy answer to effectively meet the European Working Time criteria but as doctors we must remember that our primary obligation is to the patient.

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