



## Case 18 A flare-up of ulcerative colitis

Jenny was diagnosed with ulcerative colitis, localized to the rectum when she was aged 32. She was initially followed up in the gastroenterology clinic but after two years was discharged to her general practitioner. She managed her relatively mild symptoms with intermittent use of mesalazine 1g enemas.

At the age of 37 she gave up smoking and experienced a flare up of her symptoms. She consulted Dr Jones about the problem. Dr Jones noted a two-week history of worsening diarrhoea and abdominal pain. She noted that abdominal examination was normal.

### What would you do now?

Dr Jones suggested stopping the mesalazine enemas and using prednisolone retention enemas 20 mg once daily instead. She advised Jenny to return if the symptoms did not settle.

Ten days later Jenny returned. Dr Jones recorded that the symptoms were no better. She started oral mesalazine slow release 400 mg and loperamide 4 mg each three times daily. She told Jenny to return if the symptoms did not settle.

### What would be your differential diagnosis and how would you discriminate between them?

One week later Jenny requested a home visit. One of Dr Jones' colleagues visited her at home, noted that she was opening her bowels 12 times daily, had a temperature of 38 °C and was dehydrated with a resting pulse of 112 bpm and a blood pressure of 100/60 mmHg. Jenny was admitted to hospital and two days later underwent a total colectomy for a toxic megacolon.

Jenny brought a claim against Dr Jones alleging that her assessment was inadequate and that a competent

general practitioner would have treated her symptoms more aggressively initially and sought urgent specialist opinion if the symptoms failed to settle.

### Do you think her claim will succeed?



### Expert comment

Delayed diagnosis of toxic megacolon in a patient with ulcerative colitis is a regular allegation in medico-legal cases. It may occur with an initial presentation of ulcerative colitis (Case 8) or occur, and fail to be recognized, in a patient with known ulcerative colitis.

It is relatively common for general practitioners to have to manage conditions that are usually managed in specialist clinics. The patient may have been discharged from specialist care (as in this case) or it may be that the patient cannot contact the specialist clinic or merely seeks advice about the condition closer to home.

Ulcerative colitis affects about 1 in 1000 of the population so most general practitioners will have a few patients with the condition. However, it is an example of a condition that is usually managed in specialist clinics. If a general practitioner decides to intervene and manage the patient it is necessary to be competent to do so. It may be that the general practitioner has quite a lot of experience of the condition or the general practitioner may seek information from the sources such as the BNF, review articles in journals or other authoritative online medical resources.

In this case there were various problems with Dr Jones's management.

There is a well-established system for categorizing the severity of a flare up of ulcerative colitis. This has been outlined in review articles in the *BMJ* (Collins & Rhodes, 2006) and is detailed in online UK resources

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such as Prodigy and the CKS database. This is outlined in Case Box 18.1.

### Case Box 18.1 Disease severity of ulcerative colitis

#### Mild

Fewer than four stools daily, with or without blood  
No systemic disturbance  
Normal erythrocyte sedimentation rate and C reactive protein values

#### Moderate

Four to six stools a day with minimal systemic disturbance

#### Severe

More than six stools a day containing blood and evidence of systemic disturbance (fever, tachycardia, anaemia, or hypoalbuminaemia)

Dr Jones did not record essential bits of information such as, particularly, stool frequency, the presence or absence of blood in the stool, weight loss or abdominal pain. It was not recorded whether Jenny was well or unwell and what her pulse, temperature and blood pressure was. Dr Jones recalled that Jenny did not seem particularly unwell but there was nothing to corroborate this impression and noting to show that Dr Jones had carried out an adequate assessment.

Guidance suggests measuring inflammatory markers such as ESR and CRP plus indicators of disease severity such as serum albumin. The exacerbation could be due to bacterial gastroenteritis or C Difficile and guidance recommends stool culture are obtained to exclude infection.

There was also evidence that Dr Jones had not read, or was not familiar with, standard treatment of a relapse of ulcerative colitis.

Mesalazine suppositories are considered to be probably more rather than less effective than prednisolone enemas and the guidance indicates that topical agents on their own are unlikely to be effective alone. Guidance articles suggest adding in oral mesalazine in doses of more than 3 g (rather than 1.2 g). The BNF and all guidance advise against the use of loperamide or codeine phosphate in ulcerative colitis as these agents increase the risk of toxic megacolon.

Dr Jones's level of monitoring and follow up ('see if it does not settle') also did not show adequate awareness of the risk of toxic megacolon and the fact that nearly a third of patients with ulcerative colitis end up having to have a total colectomy.

Overall, the evidence was that Dr Jones did not really adequately assess Jenny and did not show competence in the initial management of a flare-up of ulcerative colitis. It would have been reasonable to either seek specialist advice immediately or follow standard guidance about assessment and initial management and seek specialist advice if remission was not induced within one to two weeks.



### Legal comment

A GP is judged according to the standards of an ordinary competent GP. Of course, some GPs may have more expertise than others in managing certain conditions. The important point is to be able to recognize the limits of one's competence. It looks as if Dr Jones exceeded the limits of her expertise, with the result that there has been a breach of duty to Jenny. She is therefore liable to Jenny for all the consequences of that breach, which include the removal of her colon, any associated pain and suffering and (possibly) any psychiatric consequences.

It is difficult to assess the value of this claim without knowing a lot more about the circumstances. Dr Jones's lawyers will no doubt make the point that Jenny's colon was already compromised by her illness. However, Jenny's claim could well be worth tens of thousands of pounds.



### Key learning points

#### Specific to the case

- Ulcerative colitis is normally treated in specialist clinics. Approximately one third of sufferers with a pancolitis end up needing a total colectomy (Carter *et al.*, 2004).
- There are relatively simple guidelines for assessing severity and initiating treatment that a general practitioner should look up or be aware of if he/she is going to initially assess and treat a relapse of mild to moderate severity.
- Antidiarrhoeal agents should not be used.

**General points**

- General practitioners are often consulted about exacerbations of chronic conditions like ulcerative colitis that are usually managed in specialist clinics.
- It is important to seek immediate specialist advice or to consult up to date guidance and be competent before intervening in any way.

**References**

- Carter MJ, Lobo AJ, Travis SPL (2004) Guidelines for the management of inflammatory bowel disease in adults. *GUT* **53**: 1–16.
- Collins P, Rhodes J (2006) Ulcerative colitis: diagnosis and management. *BMJ* **333**: 340–3.



## Case 19 A woman with a skin lump on her leg

Martha was 35 years old when she consulted Dr Welch about contraception and also took the opportunity to mention a small lump on one of her calves. She mentioned the possibility of an insect bite on her lower leg which had occasionally been 'weepy' and had occasionally been scratched and bled. Dr Welch recorded 'pyogenic granuloma'. He recommended that Martha attend the practice's Nurse Practitioner-run cryotherapy clinic.

Martha did this a couple of weeks later and the treatment appeared uneventful.

About a year later Martha presented with a lump in the groin. This proved to be due to metastatic amelanotic malignant melanoma, which was also confirmed in a small nodule at the site of the original cryotherapy. Unfortunately the disease was not treatable.

Before she died, Martha commenced a claim against Dr Welch.

### Do you think a claim against Dr Welch will succeed?



#### Expert comment

Pyogenic granulomas are not common skin lesions. They tend to occur on the hand, lips, face or shoulder region. They are unusual on the lower leg.

Cryotherapy is a popular method of treating warts and other benign skin lesions. The difference, however, between cryotherapy and many other methods of treating skin lesions is that no tissue is available for histology. Therefore the diagnosis must be known with a high degree of certainty (which often is the case with skin tags, seborrheic keratoses and viral warts).

A pyogenic granuloma should not be treated with cryotherapy because, without histological confirmation, it may be an amelanotic malignant melanoma.

NICE guidelines suggest the use of a 7-point checklist with suspected malignant melanomas: looking for

change in size, irregular shape, irregular colour, largest diameter 7 mm or more, inflammation, oozing, change in sensation. One problem is that the sensitivity of this clinical prediction rule is very low (around 40–50%) (Abbasi *et al.*, 2004). A significant proportion of the pigmented lesions a general practitioner examines routinely should be referred urgently if the rule is strictly adhered to.

However, in this case the lesion was not pigmented. It was also on the lower leg in a woman. This is quite a common place for a malignant melanoma in women (the shoulders are commoner places for men). However, Dr Welch may quite reasonably not have even thought of the possibility that the nonpigmented lesion could be a malignant melanoma. Amelanotic melanomas are rare, and they are often described as 'the great masquerader' in skin lesions (Koch & Lange, 2000). Nevertheless, amelanotic melanomas are frequently misdiagnosed as pyogenic granulomas.

There are several potential criticisms of Dr Welch's management which exemplify some of the types of cognitive error that may occur.

A probable source of error in this case was 'premature anchoring' bias – the tendency to begin from the assumption that a nonpigmented nodular skin lesion could not be a malignant melanoma. This form of cognitive error can be compounded by 'confirmation bias': the tendency to look for information that would be consistent with the preferred diagnosis, rather than information which would refute it. The lesion looks like the pictures of pyogenic granulomas in dermatology texts.

However, in this case the lesion was single, and it was on the calf. The site was therefore less usual for a pyogenic granuloma. A pyogenic granuloma has a differential diagnosis associated with it which includes amelanotic melanoma. It was necessary to 'second guess' the presumed diagnosis. Also, the information that the lesion had occasionally been weepy and bled was ignored.

Dr Welch had not recorded any history (duration, change in size or appearance) which would suggest that he had considered alternative diagnoses.

Realistically, it was a mistake to deal with the lesion by cryotherapy: any treatment method that gave tissue for histology would have been acceptable.



### Legal comment

When the GP expert looks at Dr Welch's very brief note ('pyogenic granuloma') that will probably be enough for him to recommend that the case will be indefensible on breach of duty. Even if Dr Welch were to recall a number of reassuring circumstances to justify his decision to treat with cryotherapy, the fact he did not record them makes his position very weak indeed.

By contrast, Martha's lawyers will take a detailed witness statement from her before she dies. It will describe the history of the lump and the consultation with Dr Welch. If she dies before the trial, that witness statement will stand as her evidence, even though it cannot be cross examined.

A dermatologist may conclude that earlier treatment of the melanoma would not have saved Martha's life. But there was a delay of a year before she received treatment and so it seems likely that such an expert will conclude that earlier treatment would have made a difference.

The circumstances are overwhelmingly against Dr Welch. His MDO will want to settle the case on the best possible terms. If Martha is married and has children who are now deprived of a mother the case will be potentially expensive: well over £100 000. If not, then its

value is limited to compensation for her suffering before death and the cost of care that she will have needed as her condition deteriorated.



### Key learning points

#### Specific to the case

- When diagnosing rare skin lesions it is necessary to be very careful that one is aware of the standard differential diagnoses.
- Lesions with uncertain differentials, such as presumed pyogenic granulomas, need to be fully excised and sent for histological diagnosis.

#### General points

- Always 'second guess' and consider the differential diagnoses.

### References and further reading

- Abbasi NR, Shaw HM, Rigel DS, Friedman RJ, McCarthy WH, Osman I, *et al.* (2004) Early diagnosis of cutaneous melanoma: revisiting the ABCD criteria. *JAMA* **292**: 2771–6.
- Andrews MD (2004) Cryosurgery for common skin conditions. *Am Fam Physician* **69**(10): 2365–72.
- Koch SE, Lange JR (2000) Amelanotic melanoma: The great masquerader. *Journal of the American Academy of Dermatology* **42**: 731–4.
- NICE (2005) Guideline CG027 on the recognition of malignant melanoma.



## Case 20 A woman with microscopic haematuria

Alice was 56 when she consulted Dr Hendry. She had been feeling nonspecifically unwell with fatigue, poor sleep and headaches. In the course of examining her Dr Hendry found Alice's blood pressure was 176/100 mmHg. Dr Hendry arranged for Alice to see the practice nurse for three blood pressure checks, blood tests and ECG and urinalysis. Alice's blood pressure was satisfactory, her blood tests and ECG were normal and urinalysis showed 2+ blood. The practice nurse sent the urine sample off for microscopy and culture and this showed no growth and no cells.

### What would you do now?

Alice consulted another partner a few months later. She had malaise and dysuria. Urinalysis showed blood, protein and leucocytes and she was treated for a urine infection. No follow up urine sample was sent. This pattern was repeated a year later.

At the age of 58 Alice underwent an insurance medical and was noted to have 3+ microscopic haematuria.

### What would be your differential diagnosis and how would you discriminate between them?

The insurance report was sent to the practice but no action was taken. On her 59th birthday Alice was admitted into hospital with fever, vomiting and left renal colic. She was found to have a left hydronephrosis secondary to a stage 3 bladder cancer.

Alice brought a claim against Dr Hendry and the practice for failure to investigate persistent microscopic haematuria.

### Do you think her claim will succeed?



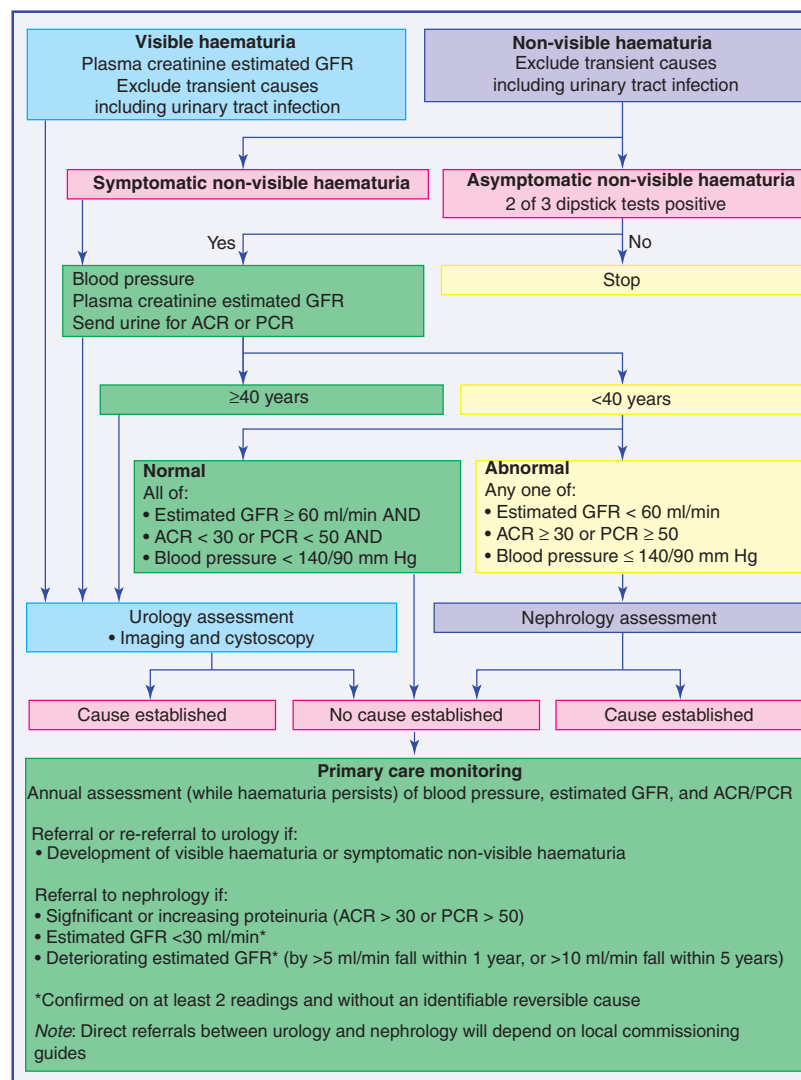
### Expert comment

Microscopic haematuria is a difficult condition for general practitioners because it is very common but can indicate serious disease. In the UK the July 2000 Referral Guidelines for Suspected Cancer (the 'Two Week Rule' referrals) recommended urgent referral of all patients with microscopic haematuria over the age of 50. In the June 2005 version this was changed to 'unexplained' microscopic haematuria.

The difficulty with this is that microscopic haematuria is relatively common and until recently it has been rather poorly defined. A 2003 review in the *New England Journal of Medicine* found studies quoting prevalence rates that varied from 0.18% to 16.1% (Cohen & Brown, 2003). Older studies suggest that 4% to 7% of the general population will have microscopic haematuria. One 1986 US study found a prevalence of 13% in asymptomatic males and females over the age of 50. On investigation 2.3% of those investigated had serious disease and 0.5% had renal or bladder cancer (Mohr *et al.*, 1986).

More recent guidance has advised that the terms non visible and visible haematuria replace the terms microscopic and macroscopic. Nonvisible haematuria includes dipstick haematuria of more than a trace of blood and red cells detected on urine microscopy. Urinalysis (of 1+ or more) appears to detect levels of haematuria equivalent to 3–5 red cells per high-powered microscopy field (roughly the previous definition of haematuria). It is not necessary to confirm with urine microscopy (Kelly *et al.*, 2009).

Common causes of nonvisible haematuria are menstruation, sexual intercourse and urinary tract infection (UTI). These need to be excluded before any other investigation. Athletes such as long-distance runners get nonvisible haematuria and should probably be re-investigated after three days' abstention from activities.



**Case Figure 20.1** Assessment and management of non-visible haematuria in primary care.

Source: Kelly KD, Fawcett DP, Goldberg LC (2009) Assessment and management of non-visible haematuria in primary care. *BMJ* 388: bmj.a3021.

Persistent unexplained nonvisible haematuria can be caused by glomerular renal disease (most often IgA nephropathy or thin basement membrane disease) or urological disease such as stones or cancer.

Recent guidance is that nonvisible haematuria in asymptomatic patients should be confirmed on two out of three urinalysis tests before being investigated. After treatment of a UTI with nonvisible haematuria urinalysis should be repeated and investigated if the haematuria is persistent. A 2009 algorithm by Kelly *et al.* (2009) is reproduced in Case Figure 20.1:

In this case it is clear that Alice had persistent microscopic haematuria that was not investigated. Dr Hendry was reassured on the first occasion that urine microscopy did not pick up any red cells. However, haematuria is often intermittent and the urinalysis was likely to be correct. It should really have been repeated at twice. The second and third episodes occurred within the context of UTIs but UTIs may be secondary to underlying urological disease and the general practitioners should really have checked that the haematuria cleared after treatment. On the last occasion the information

from the insurance report should really have been acted upon.



### Legal comment

Expert opinion suggests it will be hard to defend the practice for its failure to respond to the findings of the insurance medical. This is even though it seems that Alice did not come to the practice to ask for advice. The expert implies that a positive duty lay on the practice to contact Alice in the light of that report, particularly given her history.

Expert opinion also suggests there may have been breaches of duty by the GPs on previous occasions over the last two years or so, when further analysis should have been done, which might have highlighted underlying urological disease.

However, the expert might be asked by the lawyers acting for the GPs (and their MDOs) to express a view on whether there is a responsible body of GP opinion which might have acted as the GPs in this saga did. After all, it might be pointed out, microscopic haematuria is very common. Is it realistic, given resources, to follow all such patients up? Published guidance is all very well, it might be argued, but does it not represent an ideal rather than a basic required standard?

These are the kinds of discussions which will take place at meetings with Dr Hendry and her partner(s), before it is decided whether to concede or resist this claim. Generally, though, expert opinion in support of the doctors will need to be robust if the MDO is to defend the claim. That looks rather unlikely in this case.



### Key learning points

#### Specific to the case

- Asymptomatic 'microscopic haematuria' is a common and rather difficult finding in primary care. In the past it has suffered from nonuniform definitions of and large variations in published prevalence rates and predictive values for disease.

- Before investigation spurious causes such as menstruation, sexual intercourse and UTI should be excluded and it should be confirmed as being present in two out of three samples. Urinalysis haematuria of 1 + or more has the same significance as the finding on urine microscopy.
- More recent guidance advises the use of the term 'nonvisible haematuria' and advises an investigation algorithm reproduced above.
- Persistent unexplained nonvisible haematuria (two out of three samples) in someone over the age of 50 requires urgent referral under the NICE 2005 guidance.
- Nonvisible haematuria within the context of a UTI should really be rechecked after treatment to check that it has cleared.

### General points

- Minor unexpected abnormalities on testing are relatively common and it is important to have a clear idea in advance which need repeating (such as urinalysis haematuria) and which probably do not (such as a serum sodium of 132 mmol/l).
- It is relatively common in medico-legal cases to see abnormal results from private screening facilities (the 'BUPA check') or insurance medicals that the practice is notified about but fails to act upon.

### References

- Cohen R, Brown R (2003) Microscopic hematuria. *N Engl J Med* **348**: 2330–8.
- Kelly KD, Fawcett DP, Goldberg LC (2009) Assessment and management of non-visible haematuria in primary care. *BMJ* **388**: bmj.a3021.
- Mohr DN, Offord KP, Owen RA, Melton LJ (1986) Asymptomatic microhematuria and urologic disease. *JAMA: The Journal of the American Medical Association* **256**: 224–9.