bladder. They have been plucked from the gall bladder percutaneously or reduced to tiny fragments with extracorporeal shock wave lithotripsy. But cholecystectomy has the unique advantage of removing the organ in which gall stones form and therefore of providing a lifetime cure. A compromise method is to perform minilap cholecystectomy, but this tends to combine the worst of all worlds and compares unfavourably with the endoscopic method.[4]

In England, over 30 000 cholecystectomies are performed each year.[1] If all these were performed by laparoscopic methods the saving resulting from a reduction in bed days alone would amount to £21m. In these days of strict financial and medical audit endoscopic cholecystectomy will inevitably become the only method for routine cholecystectomy. It is an innovation that has the virtue of being advantageous for both the customer and the community.

C WASTELL

Professor of Surgery,
Westminster Hospital,
London SW1P 2AP

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Referrals to rheumatology

Better communication should prevent waste of resources

In 1986, 24 health districts had no rheumatologist.[1] Although most of these districts now have one, long outpatient department waiting lists reflect the continuing low ratio of rheumatologists to the general population. The new NHS contract offers possibilities for reducing these waiting lists: cross boundary referrals will become easier, it is said, and there is evidence that patients do not mind travelling long distances provided that they are seen sooner[2,3]; budget holders may find it cost effective to employ their own physiotherapist; steroid injections will become a minor surgical procedure; and the establishment of miniclinics (for which there is financial incentive) may alter general practitioners' management of musculoskeletal disorders. But for now do these long waiting lists reflect unnecessary referrals and, in the new climate, which patients will still need a specialist opinion?

Referral rates by general practitioners vary widely for reasons that are still unclear. It has been claimed that many referrals for a specialist rheumatological opinion are unnecessary,[4] although this view has been challenged.[5] Much will depend on the local availability of, and ease of access to, services such as radiology, physiotherapy, and orthotics. Rheumatologists consider that a proportion of referrals to them (15% in our survey[6]) could be avoided if general practitioners had access to these services. Trials of open access to physiotherapy and orthotics have shown appropriate use of the services by general practitioners,[7,8] and on existing evidence open access to these facilities should be made universal.[9]

Billings and Mole showed that of 106 consecutive new consultations for musculoskeletal conditions in general practice, 81 were for non-inflammatory musculoskeletal disorders.[10] The disorders include osteoarthritis, low back pain, neck pain, soft tissue lesions such as tennis elbow, and generalised soft tissue rheumatism. The generalist is well equipped to manage these conditions by advice and reassurance (including the use of information booklets[11]), by using analgesics and anti-inflammatory drugs, by intralesional corticosteroid injections, and by physiotherapy.

Non-specialists cannot always easily distinguish between non-inflammatory musculoskeletal disorders and those conditions that are potentially progressive and life threatening. Would increasing the amount of time spent training in rheumatology at both undergraduate and postgraduate level make this any easier? Although formal teaching in rheumatology occupies only a small part of the undergraduate curriculum, it could be argued that the prime educational aim is to teach good clinical methods, including an assessment of the musculoskeletal system.[12] Unfortunately, newly qualified doctors rarely examine the joints and so miss many conditions likely to have an impact on patient morbidity.[13] This deficiency could be corrected in postgraduate training, yet few vocational training schemes have rheumatology jobs in their rotations. Educational initiatives for established general practitioners suggest that when a doctor is interested in pursuing knowledge these schemes are effective,[14,15] but without this interest such initiatives fail.[16] Perhaps this is partly because the preferred educational methods (small group teaching, clinic apprenticeships, and "hands on" demonstrations of examination and injection techniques) are seldom offered.[17,18]

Given this background it still seems reasonable for general practitioners to refer doubtful cases for a specialist opinion. Patients with rheumatoid arthritis, seronegative spondylarthritis (including psoriatic arthritis and ankylosing spondylitis), connective tissue disorders, and other inflammatory arthritides could then be followed up in hospital. A system of shared management between hospital and primary care can help relieve congestion in hospital clinics, but such cooperation needs to be established locally with agreed guidelines. From the specialist's point of view structured referrals are of considerable benefit[5] because the expectations of both the referring doctor and the patient are clearly stated. Too often patients referred simply for advice and reassurance—for both the patient and the doctor—continue to be seen by the hospital. Better communication between specialists and general practitioners would help to prevent this waste of hospital resources.

P S HELLIWELL

Consultant Rheumatologist,
Royal Infirmary,
Huddersfield HD3 3EA

V WRIGHT

ARC Professor of Rheumatology,
Rheumatology and Rehabilitation Research Unit,
General Infirmary,
Leeds LS2 3EX

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The psychological aftermath of war

Battle shock reactions are normal and victims can be helped

The physical injuries likely to be incurred by casualties of the Gulf war and how to manage them have been widely discussed,[1-3] but much less has been said about the psychological aftermath. Useful guidelines on managing the psychiatric aspects of disasters have recently been produced,[4] but the scale of potential injuries in the Gulf war is much greater than in most civil disasters. Although the forces' own medical services will deal with both the immediate management and long term psychiatric care of those who need it, many of the physically injured will also be suffering from battle shock, and those who come through apparently unscathed will be at risk of developing early or late post-traumatic stress disorder.

More than in any other war, both field commanders in the Gulf and the defence medical services are aware of the risks of battle exhaustion and subsequent post-traumatic stress disorder—and of both the personal suffering and the manpower consequences. Battle exhaustion or battle shock is an acute disabling psychological reaction to the horrors of war, but it is a "normal" reaction, and most victims will recover fully. Treatment by the forward medical teams—who are fully aware of the triad of proximity, immediacy, and expectancy[5]—should result in 70% of battle shock casualties being returned to their units within five days. A further 10% will be able to return to other duties, and less than 20% will need to be passed back for longer term care, mainly in military hospitals and rehabilitation units.

The casualties will be drawn from an atypical population of healthy young men (and some women) who are professionals with a strong service identity. These bonds will have been strengthened by their common experience of combat. They will have more in common with one another than with the rest of the world and have considerable reserves of mutual support.

Thus these military casualties should be kept together in hospital and given an opportunity to socialise with each other and provided with facilities to do so. Those who require treatment away from the main group for clinical reasons should be kept in touch by some means.

As soon as practicable daily "debriefing" sessions should start. These should be held with individuals or service groups and be aimed at encouraging accurate recounting of events and feelings, free emotional expression, and appropriate grieving. Talking to the relatives of dead comrades, attending or watching funerals or memorial services, and creating collages illustrating their experiences or writing about them all help casualties face up to their losses. Though they also need to recognise that their reactions are normal, they will need help in restoring their confidence, morale, and self image. Some will need individual counselling.

Helpers should be advised not to probe too deeply but to limit intervention to dealing with the war experience and current problem solving. Many casualties will express intense guilt and self denigration, but those about them will also have to bear anger, resentment, and derision: "What do you know about it? You weren't there."

Printed handouts can be useful in helping casualties and their relatives understand the reactions they will experience. Relatives can provide support and comfort to each other, and whenever possible a room with simple facilities should be set aside for their exclusive use. They too may need professional and practical help, so social service departments and voluntary agencies should be concerned at an early stage.

The emotional intensity of caring for war casualties will affect staff, who need adequate rest and support with both regular staff groups and individual help if required. The Royal College of Psychiatrists has circulated to all regional medical officers a list of people with particular experience in post-traumatic stress disorder, disaster relief, bereavement, and staff counselling.

Physical casualties may still be in a state of battle shock on arrival in Britain so that intense fear, hyperarousal, and hysterical symptoms including fatigue, amnesia, or loss of motor or sensory function may be present. Others may seem withdrawn, apathetic, or mute. In such cases support, rest, and reassurance are a necessary preliminary to recovery and detailed counselling or exploration must wait.

Post-traumatic stress disorder as described in the *Diagnostic and Statistical Manual of Mental Disorders*[6] may develop early or be delayed for months or even years.[7] The trauma will be persistently re-experienced as recurrent intrusive recollections, recurring dreams or nightmares, flashbacks, or intense distress triggered by events stirring feelings or recollections relating to the original experience. Victims may make efforts to forget or deny the trauma and suffer feelings of detachment, restricted capacity for feelings, and a constriction of interest associated with an inability to contemplate the future. Many show guilt, irritability, insomnia, impaired concentration, and hypervigilance. Counselling should be directed towards limiting or preventing the disorder. The Horowitz impact of events scale[8] and the general health questionnaire[9] may be useful in screening casualties to identify those requiring more intensive intervention.

Some servicemen will undoubtedly reach NHS hospitals. What they need most is first class medical care delivered by caring staff who know how to listen and when to offer