What follows is not the fruit of my own experience in battle. It is, however, distilled from the experiences and writings of others to whom I am indebted.

**Problems**

The author of "The Third World War, August 1985" Gen Sir John Hackett has said that 'the result of every land battle is determined by the number of people who run away, and by nothing else'. Are we then talking about craven cowardice?

One of history's most successful generals, Sun Tzu, writing on the Art of War about 350BC insisted that 'courage or cowardice depends on circumstances'.

Let us glimpse one of the circumstances that our troops might have to face. (There followed a one and a half minute extract from the training film 'The Effects of Artillery Fire'). Unfortunately you cannot feel the shock waves, smell the explosive, sense the imminence of annihilation, and one and a half minutes is far too short.

The Warsaw Pact tactical doctrine provides for an artillery concentration of one gun for every eight metres along an eight kilometres front. Shells, of which at least one in four of the stockpile contain chemical agents, and rockets, would be delivered at the rate of 500 to 600 rounds on a platoon position in 10 minutes, whereupon the barrage would advance to the next target line. The doctrine supposes that such a bombardment would inflict on the target troops no more than 25% casualties, but the remainder, for whom there would be no escape from the ordeal, would be rendered immobile for at least 2 minutes, sufficient for the first wave of tanks and infantry to dash the last 300 metres and overrun the forward anti-tank defences and machine gun posts. This condition affecting all for minutes, and some for hours or days, is termed by the Soviet Army 'battlefield paralysis'. That the doctrine has some basis in fact is supported by this historical account of the 1944 battle for Caen in Normandy in which battle-hardened panzer troops displayed both temporary paralysis and in some cases total breakdown. (There followed six minutes of the film 'Operation Goodwood'). The following is a transcript of the sound track:

'Wave after wave of bombers came over, and dropped their bombs on the villages in front of us. It really did seem that nothing could live under the bombardment, but how wrong we were. Lt Von Rosen, acting Company Commander of the 3rd Company of the 503 Heavy Tank Battalion, was there. He recalls:

*Text of a presentation at the USAREUR and Seventh Army Medical Surgical Conference at Garmisch Germany on 18th May 1981.*
Early in the morning I was awakened by the thunderous sound of aircraft engines. As I crept out from under my tank I saw the first bomber waves approaching. From this moment on our concentration area was subject to air bombardment which lasted for two and a half hours without interruption. We were located in the very same part as the bombardment area. It was like hell and I am still astonished that I ever survived it. I was unconscious for a while after a bomb had exploded just in front of my tank almost burying me alive. I could see that another tank about 30 metres away had received a direct hit which had set it on fire instantly. A third tank was turned upside down by the blast, and when I tell you that the tanks weighed 58 tons and were tossed aside like playing cards you will see just what a hell we found ourselves in. It was next to impossible to see anything as so much dirt had been stirred up by the explosions. It was like being in a very thick fog. It was impossible to hear anything because of the unceasing crashing of explosions around us. It was as if we were deaf. It was so nerve-shattering that we could not even think. All one could say to oneself was ‘Will there never be an end to these explosions’. After two and a half hours the air bombardment stopped suddenly and the following silence was uncanny. As far as my Company was concerned two turrets were completely neutralized, two others were so badly damaged that they couldn’t be employed. All the tanks were completely covered with earth and the gun turrets had been torn completely out of adjustment by the shock effect. Fifty men of the Company were dead, two soldiers had committed suicide during the bombardment, another had to be sent to a mental hospital for observation. The psychological shock of these terrible experiences remained with us for a long time.

‘It had been the heaviest air bombardment in support of a ground attack ever mounted to that date and it was hoped that any enemy in the path of the armour would have been effectively neutralized. It was to be followed by the artillery barrage behind which the 11th Armoured Division would advance. At 0745 hours the artillery opened up. Tank crews had strict orders to be in their tanks but these were not completely obeyed and a few short fall rounds falling among the leading tanks killed two of the Regiment. We then set off as close behind the barrage as we could. We had been told to keep within 100 yards of the barrage. Soon we came across our first enemy. They were dazed, demoralized and they came out from cornfields attempting to surrender to the nearest tanks. By this time the dust, smoke and bomb craters were making control of the squadron more difficult and slowed our advance somewhat. However, I was able to open up the squadron to cover a frontage of about 500 yards. We saw a few enemy in the orchards to our front and in the bushes and trees on our right flank, and I gave instructions to my right-hand troops to shoot up the forward edge of the orchard and the trees whilst on the move. When we came to the orchard I could see the German anti-tank gunners lying in their trenches or beside their guns completely dazed and taking no interest in the proceedings.’

We are talking then about men who as the Duke of Wellington’s gunner officer, Capt Mercer, put it, ‘fled not bodily, to be sure, but spiritually, because their senses seemed to have left them’.
We call it ‘battleshock’. By ‘battleshock’ we mean inability to fight which does not result from major physical injury or disease. Brig El Sudany El Rayes, a senior psychiatrist in the Egyptian army feels that, despite their diverse forms, it is logical to describe under one heading conditions which have a common aetiology in the unique circumstances of battle; affecting for the most part stable individuals; and which require similar management, namely early intervention, in the battle zone, with the expectation of rapid return to duty. This must have a familiar ring to students of the subject of breakdown in battle in the two world wars. But the consensus following the 1973 Middle East war, held by many to represent on a limited scale much of what a major land battle in central Europe would be like, is that the principles of successful management of battle shock are as valid today as when they were first discovered in the 1914-1918 war. Equally valid is the yardstick by which we can predict the number of battle shock cases reaching the medical organization in any given sector at any given time. That yardstick is the number of wounded in action which in turn reflects the intensity of the battle. We also need to remind ourselves of the staggering total number of troops who are temporarily incapacitated in this way during fierce fighting. For example the 6th United States Marine Division lost 2,662 wounded in 10 days intensive action which also generated 1,287 psychiatric casualties. Between July and September 1944 the ratio of battleshock to wounded in the British Second Army in Northern France also reached over 20%. How often do we include 30% of battleshock cases amongst our simulated casualties during military exercises?

Are we to suppose that if we were attacked without warning by an enemy capable of launching a massive onslaught without overt preparation (enabling surprise to be total since distinguishing between an exercise, a feint, and an all-out attack, can be a conundrum soluble only when it is too late), an enemy with overwhelming superiority in numbers of men, planes and missiles, that the percentage of battleshock cases would be less than in World War II? This potential enemy believes in initial surprise, concentration of artillery, close air support, speed of manoeuvre and deep penetration with disruption of supply lines, continuous operations round-the-clock made possible by infra-red and other imaging systems (but can replace his own tired and battered units by fresh ones), and also believes in the aggressive use of electronic, chemical and tactical nuclear weapons and, let us not forget, rumour. Are we to believe that the consequent terror and turmoil, the relentless hammering, the loss of friends being killed and injured on all sides, the frustration of not being able to fight back effectively, the isolation, exhaustion and despair, will result in fewer men so afflicted? If we include in the number who run away those who flee ‘spiritually’ as well as those who flee ‘bodily’ then General Hackett may well be right that they will determine the outcome of the battle.

Why then are we so ill prepared to deal with battleshock? Is it that we have been lulled into a false sense of security by the figures arising in the quite different circumstances of our respective experiences in, let us say, Aden, or Vietnam? Or do we rely on the hope that the need to fight in Europe will not arise. Few
who have read the already mentioned fictional ‘future history’ of the third world war with its prophetic 6th chapter on ‘Unrest in Poland’², and have been aware of the factual invasion of Afghanistan in 1980 by 85,000 Russians, can doubt that the Warsaw Pact has the ability, could have the motive, and would have the will to attack the West. The only thing that will ever be in doubt will be their intention.

Or do we suppose that our battleshock victims merely ride along the evacuation trail with their traumatized fellows? Not only is that a recipe for turning battleshock into chronic psychiatric disorder, as has been shown over and over again this century (most recently in Nigeria and Israel), but it is also an invitation to other weary and disheartened soldiers to find a legitimate way out of their ordeal be developing the ‘evacuation syndrome’ which has cropped up in so many forms in twentieth century warfare, from the epidemics of respiratory symptoms following a brief experience of gas in World War I, to the epidemic sleepwalking affecting soldiers in Vietnam. (The latter was, I believe, cured by putting the sufferers on guard duty at night until the condition subsided). The management of the battalions of battleshocked, and the streams of surgical stretcher cases who can no longer contribute to the cause, must be radically different, and the training and organization of field medical units must take account of these differences.

Another argument for doing nothing often heard is the statement ‘it will all be over so quickly that the problem of battleshock is irrelevant’. Many charts have been drawn showing peaks and troughs of World War II casualty figures reflecting the fluctuating intensity of combat, and the chart for battleshock corresponding closely to the chart for trauma, with the battleshock lagging slightly behind, principally no doubt because of the lower movement priority accorded to such cases. This chart (Fig 1) from the 1973 Middle East War shows the same pattern. Not only do we see the numbers of battleshock matching those of trauma but it illustrates the major lesson of that war; that the peak incidence of battleshock was in the first few days. Gone is the notion of battle ‘exhaustion’ developing after protracted exposure to the ordeals and terrors of modern warfare. The shock can occur on day one. A secondary lesson suggested by Levav and his co-workers³ is that ‘a critical period of up to one week for the treatment of combat reactions established a dividing line between good and poor outcome’ and ‘it would be advisable to add other criterion, brevity, to the three already well established in the literature — immediacy, proximity and expectancy — to assure satisfactory outcome’. It thus becomes apparent that a battle intensive enough to be over quickly can also be so intense that it generates battleshock rapidly enough for the victims to be incapacitated, to recover and to return to fight before such an ultra-short war is over. We have already seen that we are talking about very large numbers of fighting men rendered ineffective by battleshock, sufficient, in a war with many killed and wounded as well, to affect the outcome of the battle. But what if we win even half of the battleshocked back, to carry on at least for a few days — we would then add a rider to Hackett’s dictum. “The result of a land battle is determined by the
number of people who run away (bodily and spiritually) *and* by the number of those who can be enabled to return to the fray." In battle, ladies and gentlemen, psychiatry is concerned with reinforcement. We are talking of the equivalent of a whole brigade per corps.

**Solutions**

*Prevention*

The best remedy is prevention and the surest is peace, but since we cannot always count on that we must look at other preventive measures.

*Selection*

Much has been said about the hopelessness of eliminating battle shock by selection. This view derives from sources ranging from anecdotes of 'neurotics' who showed incredible toughness in combat and 'tough guys' who cracked under apparently minimal stress, to statistical studies of whole armies in World War II. Professor Rachman's study of British bomb disposal men who have been successful in their work despite being virtually unselected for the task tends to bear this out. Indeed the more ordinary these men were in terms of their psychological profile the more likely they were to gain an award for gallantry. They were not self-selected. The majority when they joined the ordnance branch from which the bomb disposal men were drawn did not know that they would be expected to carry out this work. However, one has to concede that some elementary selection was at work in the formation of the ordnance branch itself. If the men were criminal, illiterate, known psychotics, alcoholics or drug abusers they would not have been there in the first place. "Reverse selection" of course
consists in eliminating from the Service those who develop such gross and 
continuing mental or behavioural disorders, especially those who may infect 
others. If a man cannot cope with life without massive recourse to drugs how 
can he cope with battle?

"Reverse selection", rigorously carried out, may engender fears of having too 
slim an army. In practice the drain on numbers is offset by increasing pride in 
their professionalism by the remainder, by an increased desire to belong or join 
when the entire army becomes a corps d'élite. This disapprobation of the group is 
then a powerful sanction against an erring individual which is expressed ultimately 
by expulsion, and discipline and morale are high. This does not of course absolve 
politicians, and the societies they represent, from the obligation to sustain the 
men and women who serve them. The contempt of the community at home or 
the need to rely on social security are hardly likely to encourage the best to 
enlist and serve on in a free society. Too often money is devoted to complex 
and expensive equipment which is rendered useless when abandoned or misused by 
its bewildered operator, or is simply not used at all when his hand freezes on 
the trigger. People are our prime resource and must be our first priority. In the 
end it is the quality not the quantity, of people and not equipment, which will 
determine the outcome, or better still prevent the outbreak, of a land battle.

Cohesion

It is becoming axiomatic that the strongest bulwark against battleshock is 
group cohesion. By the same token integration into a cohesive group is a sine 
qua non for maintenance of recovery from battleshock. In the Soviet Army group 
cohesion is achieved through the company political officer developing common 
attitudes, and we would probably all agree that leadership plays a part, but 
most of all it is achieved by shared experience. The ancient Bantu went through 
life from the age of six or seven in a group called an Ntanga which herded cattle 
together, played together, fought together, went through ceremonies together. 
We on the other hand move individuals from unit to unit in peacetime, replac­
ing others in turn, and rely on piecemeal reinforcements in war with little hope 
of the individuals concerned being able to integrate rapidly enough into a 
cohesive group.

Organization, therefore, can create the conditions for cohesion to develop. 
Arduous training accelerates the process, the shared first experience of battle 
sets the seal.

If it was circumstances not selection which made heroes of the bomb dis­
posers, it was training that enabled them to do it. Most of this was achieved 
during their training course, but disposing of the first successful real explosive 
device represented for the individual a watershed in his training and confidence-
building from which he never looked back.

Hardening

Arduous military training has four main aims:

i. It expands the boundaries of a man's accomplishment giving him both 
satisfaction and confidence.
Training for Battle Shock

ii. By rehearsing his tasks over and over again under the testing circumstance of wearing full NBC protective clothing, of sleeplessness, of not knowing when (or whether) the exercise will end, the probability that he can function automatically in the supreme test of battle is increased.

iii. It enhances group cohesion not only because sharing an ordeal binds people together, but also more specifically in the case of NBC clothing, because unless soldiers learn to overcome the barriers to personal communication and even mutual identification imposed by those unearthly suits the basis on which cohesion actually works is destroyed.

iv. It toughens a man’s ability to face particular stresses, such as bombardment. In this connection we may expose a man to fear during parachuting, rock climbing or live firing, but how often does a man see dead or dismembered soldiers, even in simulation or on close-up film of real accidents? Isn’t this also part of training for battle shock?

Treatment

A growing number of army doctors, even some with lengthy service, will not have encountered battle shock and will have only a hazy idea of the ways in which it presents. The following examples taken from a 1944 training film give some indication of what we are talking about.

(There followed a seven minute extract from “Field Psychiatry for the MO”). Personnel with experience in clinical psychiatry are surprised to discover how quickly deeply shocked soldiers recover. Teams newly exposed to combat casualties tend to err on the pessimistic side. They also discover the impossibility of predicting outcome reliably at the first encounter.

First aid

The standard procedure for all battle shock cases is:

i. Retention as near as possible to the man’s unit location consistent with removal from the worst effects of the battle.

ii. An initial period of rest. The entire 27th Regiment of Foot, the Inniskillins, slept during the beginning of the Battle of Waterloo at the rear of the battleground, three quarters of a mile behind the front line (which may have helped them subsequently to take the heaviest casualties from artillery as they stood for the next four hours in the forefront of the battle without giving ground: 450 out of 750 officers and men were killed or wounded).

iii. Treatment as a soldier not as a patient.

iv. Work, which can be of value to a hard pressed medical unit coping with a flow of casualties generated by the same intensive battle which produced the battle shock.

v. Rapid return to duty if possible to his original unit, or if not with a small group of others to another unit.

Maybe half will not fulfil the expectation of recovery at the first medical location but the process can be repeated at the next and some more will make it.
Medication

You will notice that the treatment outlined above does not include medication other than with the universal remedies of tea, coffee and tobacco. Some would argue that in a chaotic fast moving war in which medical staff are swamped with casualties one cannot afford to turn a man who can at least move, and will soon care for himself and others, into a stretcher case who would then, like all stretcher cases, become a drain on resources instead of a contributor to them. Nor can one afford to remove the last vestige of control from an overwrought individual by disinhibiting drugs. The majority of battleshock cases are subdued, not overactive, and only a few of the latter type will fail to respond to firm handling. (This is worth remembering by the way when briefing exercise battleshock casualties who in the past have tended to be represented by a single conspicuous disruptive idiot). If psychotrophic medication is deemed imperative, haloperidol is the drug of choice.

Aetiological factors

Consideration of aetiology suggests refinements of treatment.

Fear — A large number of battleshock cases are explicable in terms of fear, expressed by a sympathetic overactivity beyond that which is inevitable in battle and compatible with continued effectiveness. Such cases are recognizable, and in theory susceptible to management by behaviour-therapy. This usually involves temporary removal from the overwhelming stress, reassertion of the soldier's control, his determination to overcome his crippling reaction, mental rehearsal of the traumatic events with group support, and finally actual re-exposure to the original stress.

Fugue — This can be seen as a cerebral rather than somatic response to overwhelming fear in which the memory of the experience is so painful that, along with a good deal of the soldier's awareness of the outside world, it is excluded from consciousness. Abreaction, that is mental recreation of the traumatic experiences together with their full emotional accompaniment, is a well-tried therapeutic technique often applied in such cases.

Conversion — A small number are driven by their fear into the loss of some faculty such as the use of a hand or, in its subtler form, to be unduly incapacitated by minor trauma or illness. The important first step here is recognition of the condition by the clinician; to be followed during a temporary respite from the precipitating stresses by recovery aided by suggestion; and eventually recognition of the condition by the sufferer. Incidentally shooting, or the threat of it, is a method of suggestion often tried, particularly for those who have opted out of the battle in a more obvious way by drug abuse or desertion. It has, however, never really been shown to succeed in promoting fortitude, as opposed to preventing flight, and it is certain that those shot will not renew the fight against the enemy.

Bereavement — I would like to suggest, bearing in mind the first example in the film, which represents one of the commoner forms of battleshock, that
the role of bereavement in generating depressive shock reactions is underestimated. The fundamental fact is that battle shock occurs when death and mutilation are imminent. It is assumed unfairly that this implies that the sufferer merely fears his own extinction. But surely in a truly cohesive unit there is also inevitably loss of close companions? In everyday life one may adjust to this in a day or two. In battle the adjustment has to be made perhaps several times in a day and without a chance to fulfil the human need to mourn. The corollary of this is that there is a case for employing guided mourning in treatment, as described by Mawson and his co-workers, as well as, in some cases, electro-convulsive therapy.

Endorphins — It has been suggested that formation of morphine-like substance, endorphins, in the central nervous system in response to stress, resulting in prolonged inhibition of CNS activity (for minutes or hours, rather than the more usual milliseconds or seconds of inhibition engendered by neuro-transmitters) may explain what happens in at least some cases of battle shock, and account for those anecdotes in which one officer remarks to another “You seem to have lost your leg. Sir” to which the other replies “By jove, Sir, so I have”. If this model is correct there are several implications: it can happen to the most stalwart, it is strictly temporary and will disappear spontaneously in the absence of continuing extreme stress, and may even be susceptible to specific parenteral treatment.

Organization

There is no reason why first aid and even the principles of more specific treatment should not be applied within the battalion. In practice, though only small numbers who respond readily can be dealt with in this way.

The first location at which casualties can be held for up to two days and managed by medical personnel will be a divisional administrative area. Here must be located the first Battleshock Rehabilitation Unit (BRU) manned by a section of the medical battalion and supported by a Field Psychiatric Team (FPT).

Dr Shabtai Noy, a reserve officer of the Israeli Defence Force, argues cogently from history and the likely nature of a Central European war that the Divisional FPT will be swamped by a gush of casualties just when they are in a position to be most effective in arresting the rearward flow and bringing about recovery and return to duty. He suggests deployment of mobile FPTs from the rear. Given the chaotic scenario and communication problems we are considering, a safer solution is initial deployment of FPTs forward with the option of withdrawing them rearward subsequently. Even so there is still a need to have additional BRUs alongside the general hospitals in the rear combat zone to take the overflow, while still fulfilling the four criteria for successful outcome — immediacy, proximity, expectancy and brevity. Indeed, bearing in mind that battle shock cases will occur locally, will be included willy nilly in the casualty stream without any guarantee of immediate evacuation, and battle shock will in any case affect a significant number of trauma cases (about 30% in one Israeli study) it is necessary to have some psychiatric support in every medical facility.
Role of the field psychiatric team

With literally hundreds of battleshock cases held in BRUs, the psychiatric teams can hardly engage in formal behaviour therapy, much less analytical psychotherapy. What they must do is recognize battleshock cases and prevent their evacuation, assess and re-assess their progress towards return to duty or eventual removal from the combat zone, have an eye open for the development of ‘evacuation syndromes’ and initiate or nominate therapy to be carried out by others, even by the battleshocked themselves, such as group recapitulation of the events of the recent battle.

Training

Is it not a bit late to be instructing soldiers after the battle has started? Should not every soldier be taught the elements of the management of battleshock together with the maintenance of airway and the arrest of haemorrhage as part of his basic training? Is there anything which I have said which cannot be understood by a layman?

If combat troops require this training how much more do medical personnel, specialist and non-specialist, at all levels, need to be versed in the principles and rehearsed in the practice of dealing with battleshock. Unless in every exercise up to one third of the casualties, suitable briefed, represent the battleshocked element, how can either the army as a whole, both staff and rank and file, or the medical organization, learn to accept and cope successfully with this inescapable aspect of intensive war?

Finally medical personnel themselves are not immune from battleshock, though being wholly occupied with casualties helps. Medical personnel too need those elements of hardening, over-learning of skills, increasing confidence and cohesion induced by arduous training.

Ladies and gentlemen, by way of training for battleshock there is much to be done.

REFERENCES
