“Shattered Illusions – The Thiepval Barracks Bombing, 7 October 1996”

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SUMMARY: The Provisional IRA’s ceasefire ended abruptly with the Canary Wharf bombing in London on 9 February 1996. Hopes that violence would not return to Northern Ireland were shattered by the explosion of two car bombs in the headquarters of the British Army in Ulster in October 1996. The second bomb specifically targeted medical staff treating casualties from the first explosion. This article describes the medical aspects of this incident, including the extensive use of critical incident stress debriefing, and emphasises the implications for the major incident plans of medical centres and military hospitals.

Introduction
The Provisional IRA’s eighteen month ceasefire came to an abrupt end with the Canary Wharf bombing in London on 9 February 1996. The next few months saw further terrorist attacks in England and Germany - the Manchester bomb in June, parcel bombs in London, a mortar attack on an Army base in Osnabruck, a foiled attempt to blow up Hammersmith Bridge, London, and the narrow aersion of another attack with the capture of an active service unit and ten tons of explosives in London in September 1996. However, the lack of overt violence (apart from ongoing punishment beatings) in Northern Ireland led to hopes that a 'de facto ceasefire' might remain in place there. Such illusions were shattered with the explosion of two car bombs in Thiepval Barracks, Lisburn, the HQ of the British Army in Ulster, on 7 October, 1996. This article gives an account of the medical aspects of this incident and the lessons learnt from it.

The Incident
At 4.40pm on Monday 7 October 1996, a car bomb containing approximately 400 kg of home-made explosive exploded in the car park of the Logistic Regiment in Thiepval Barracks, severely damaging the adjacent buildings. Twelve minutes later, as the first casualties from this explosion were being resuscitated at the medical centre within the Barracks, a second equally large car bomb exploded outside the treatment rooms, burying a casualty and the attendant medical personnel under the debris (Fig 1).

This bomb also caused further injury and mayhem in the vicinity of the building. At least sixteen people were injured by the first bomb, and an equivalent number by the second.

Incredibly there were no immediate fatalities from either explosion. However, the most severely injured person from the first blast sustained further serious wounds in the second one, and died four days later, thereby becoming the first British serviceman to die from terrorist action in two years.

Medical Management
After the first explosion, two of the injured personnel, including the most critically wounded one (Soldier A), were carried by stretcher over a distance of about 150 metres to the medical centre. Because of the site of the explosion, other casualties were forced to take an indirect route towards the medical centre, which fortunately meant
that they were not caught by the second blast.

At the medical centre, there was just enough time for the medical personnel to start applying dressings and to prepare intravenous infusions before part of the building was blown down on staff and patients. The blast also wrecked the dental centre at the far end of the building, as well as destroying the Royal Army Dental Corps’ Northern Ireland HQ opposite the medical centre (Fig 2). After digging themselves out of the debris, and despite their injuries, the medical staff renewed their resuscitative efforts with what equipment they could salvage.

**Triage and Evacuation from Thiepval.** Four soldiers, who had all been in the open within 20 metres of the first explosion, were seriously injured by the first blast. The most critically injured of them (Soldier A) was further injured by the second explosion. He was evacuated from the destroyed medical centre by ambulance directly to the Regional Trauma Centre (see below). The other three, who had not reached the medical centre when the second bomb went off, were evacuated directly from the scene of wounding to the local civilian hospital for resuscitation (see below).

In the meantime, because of the very real fear of further explosions, a large building within Thiepval was identified, searched for secondary devices and secured.

Other casualties, personnel not performing essential duties, and military families living on base were directed to this venue while the rest of the camp was searched and an announcement was made requesting any personnel with medical experience to gather in this area. This call brought together a variety of medical professionals consisting of a psychiatrist, nurses, Regimental Medical Assistants, Combat Medical Technicians and first aiders. Initially the only doctor there was the psychiatrist as all the others had been treating casualties in the medical centre when it was blown up. A first no medical equipment was available so personnel donated clothing or any clean materials to be used as bandages and dressings as required. However, basic medical kit quickly appeared (e.g. first aid kit from motor vehicles) and soon some drips, syringes and other medical equipment arrived from the wreckage of the medical centre.

A triage system was quickly instigated so that casualties could be directed to appropriate areas for further assessment and treatment, and an evacuation route was organised with the civilian ambulance services. In total, twenty-five casualties with relatively minor wounds (walking wounded, priority 3) were evacuated from this location for further treatment, mainly to the military hospital (see below).
Regional Trauma Centre (Royal Victoria Hospital, Belfast). Soldier A was the only casualty to be transferred directly to the Regional Trauma Centre, the Royal Victoria Hospital (RVH) in Belfast, a twenty minute journey away. There a tried and tested Major Incident Plan had been initiated as soon as the news of a large bomb in the area had been received. This soldier had sustained burns mainly to his back totalling more than 50% of his total body surface area, in addition to compound fractures to his occiput, scapula, arm, and leg, together with multiple smaller soft tissue wounds from flying glass, metal and asphalt (Priority 1). He was intubated and ventilated, and required repeated surgery and intensive care. Despite this, he died four days later of multiple organ failure.

The three other seriously injured soldiers who were resuscitated initially at the nearby civilian hospital were also transferred to the RVH for definitive treatment, together with two civilians with suspected blast lung (see below).

Local civilian hospital (Lagan Valley Hospital, Lisburn). This hospital is situated five minutes’ drive away from Thiepval. Its Major Incident Plan was activated as soon as the Casualty Consultant heard the first explosion, in anticipation of receiving multiple casualties within minutes. A total of five soldiers and three civilians were in fact sent for resuscitation and initial treatment to the Lagan Valley accident department there.

One soldier (Soldier B) was unconscious and critically ill from hypovolaemic shock on arrival (Priority 1). He had two large shrapnel wounds, one to the back of his left thigh causing a compound fracture of the mid shaft of his femur, and the other penetrating his right buttock and ilium to lacerate his right external iliac artery. He was immediately intubated and ventilated, external haemorrhaging was stopped by direct pressure and Thomas splinting, and a transfusion of O negative blood was commenced. He was then rapidly transferred directly to the vascular theatre at the RVH, where he underwent emergency laparotomy and repair of his vascular injury with dacron graft, and intramedullary nailing of his femoral fracture. He subsequently underwent repeated debridement, and rotation of a biceps femoris flap with skin grafting to cover his femoral fracture and hamstring defect.

One soldier (Soldier C) had a compound depressed right occipital fracture with shrapnel barely lacerating the transverse sinus, in addition to many small superficial fragment wounds (Priority 2). This soldier had her wounds dressed and an infusion commenced. Because she was fully conscious with a Glasgow Coma Scale of 15 she was only anaesthetised, intubated and ventilated after transfer to Neurosurgical care at the RVH. There she underwent elevation of the fracture, removal of the embedded...
shrapnel, and elective ventilation for 48 hours. She then
developed CSF rhinorrhoea which ceased after insertion of
a lumbar cerebrospinal fluid drain for four days. Later she
was transferred to the Duke of Connaught Unit (DCU) for
convalescence and rehabilitation. She was left with a
degree of cortical visual impairment.

Another soldier (Soldier D) had signs of blast lung with
haemoptysis and wheeze (Priority 2), and so was
transferred to the Intensive Care Unit at the RVH. There he
was electively ventilated for three days to optimise his lung
function before transfer to the DCU for convalescence. He
eventually made a full recovery.

The other two soldiers had small soft tissue fragment
wounds from shrapnel, and multiple bruises (Priority 3),
so were transferred straight to the DCU after wound
dressing for debridement.

Military Hospital (Duke of Connaught Unit, Belfast). Twenty five patients (all Priority 3) were transferred for
treatment to the DCU twenty minutes away from Thiepval.
Twenty three of these were evacuated directly to DCU
from Thiepval within the first three hours. The other two
were transferred later that evening from Lagan Valley
Hospital. Sixteen were discharged the same evening, while
nine remained at the unit for between one and five days.
Their injuries comprised mainly bruises and multiple soft
tissue fragment wounds, measuring <1 cm diameter, caused
by glass or shrapnel. These wounds were cleaned up and
either left open or closed under local anaesthetic. Only one
soldier required general anaesthesia that evening for
removal of multiple shrapnel fragments (all wounds <3 cm
diameter), followed by delayed primary closure at five
days. Surprisingly, none had fractures or burns.

Four patients (1 male, 3 females) had severe acute
psychological stress reactions (with tearfulness, shaking,
y hysterical paralysis, numbness of affect or agitation),
which responded to calm reassurance, though two were
admitted overnight for observation. One patient had
abdominal pain presumably from blast injury causing
internal bruising, but remained cardiovasculally stable and
improved rapidly with conservative management over 24
hours. Five patients complained of varying degrees of
deafness and tinnitus, but all had clear tympanic
membranes. These five had audiograms and ENT
assessments within five days, and recovered fully. One
patient, who had been looking in the direction of the first
car when it exploded, had slight diminution of vision in
one eye. He was referred for ophthalmic assessment and
recovered fully.

Because the medical staff from the destroyed medical
centre at Thiepval had been too busy caring for casualties
to attend for medical treatment themselves, they were not
counted in the initial casualty estimates from the explosion
(which were based on numbers of patients seen at any of
the three hospitals that evening). Others who were not
included in the initial casualty estimates were the several
dozens patients with minimal injuries or stress reactions not
requiring hospital attention, who were seen in the
following 48 hours at the medical centre.

However, over the next few days the medical staff from
Thiepval attended for formal medical check-ups at the
DCU. All had some sleep disturbance and varying degrees
of tinnitus or temporary high frequency hearing loss. One
had markedly diminished lung function tests and was a result
of inhaling 'Rock Wool' roof lagging, one had considerable
soft tissue bruising, and another had a marked exacerbation
of sciatica.

Critical Incident Stress Debriefing
Duke of Connaught Unit. The sixteen patients who were
discharged the same evening after initial treatment at the
DCU were all seen immediately prior to discharge by a
senior member of the hospital staff. They were given a
handwritten discharge summary detailing their treatment,
and reassured that follow up arrangements would be made
the next day for Critical Incident Stress Debriefing (CISD).
They were asked to return to a follow-up clinic 48 hours
later to ensure that no physical injury had been overlooked
and to have their wounds inspected.

At this follow-up clinic, those requiring ENT
assessments were given their appointment times, and
all were given exact timings for their debriefing
sessions.

A Debriefing Handout (incorporated in Annex A)
prepared by the military Community Psychiatric Nurse
(CPN) was also given to them. This emphasised the normal
reactions that could be expected in response to such an
abnormal event. In the meantime the CPN had also
individually met and debriefed the nine patients who had
been admitted.

Thiepval Barracks. On the evening of the bombing, the
CPN arranged for the several hundred military and civilian
personnel who had gathered in the protected area of
Thiepval Barracks to be informed that CISD sessions
would be held for them at about 72 hours. The aims of
CISD are highlighted in Table 1.

Table 1
The Aim of CISD (Finnegan, 1995)

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<th>Aim</th>
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<td>Help survivors to come to terms with the traumatic event</td>
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<tr>
<td>Provide survivors with details of normal stress reactions</td>
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<tr>
<td>Reduce stigma associated with mental health interventions</td>
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<td>Provide a pathway for further support, if required</td>
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Over two days following the blast, notification of the
planned CISD sessions was published throughout the
Province on the military net. In addition several hundred
Debriefing Handouts were distributed to all units and
military families in Thiepval informing them of debriefing
timings and normal stress reactions. On the third and
fourth days following the incident 407 personnel affiliated
to Thiepval Barracks were debriefed. Thirty two debriefers
were called upon to help with the CISD. These critical
incident stress debriefers had all previously taken a course teaching them the relevant skills. This course is held two-monthly within the Province and is facilitated by the Northern Ireland Community Mental Health Team.

Care was taken to hold separate sessions for personnel from the transport and logistic units which had been most severely affected by the first blast, for the medical and dental staff who had been specifically targeted by the second blast, and for the camp guards who had been on duty on the day of the bombing.

For logistic reasons, particular emphasis was placed on gathering people together in small groups of seven or so individuals, under the leadership of two trained CISD debriefers. This gave each individual adequate opportunity to recount his or her experiences and feelings at the time of the bombing and thereafter. The emphasis throughout the debriefings was that the feelings that people experienced were normal reactions to an abnormal event.

Medical lessons

In this forum it is intended to discuss the security implications learnt from this incident only where they impinge directly upon medical matters. Many of the lessons that can be learnt from the treatment of individual casualties from terrorist incidents and from bombings in particular have been previously described (1-8). The severity and types of injuries from this incident (two Priority 1, two Priority 2, and over thirty Priority 3) are typical of explosions in an open area (6-8). There are however a number of medical organisational lessons which have been illustrated by this incident.

Medical Centre

Medical staff as targets. The specific targeting of the Thiepval Medical Centre with the second bomb was a timely reminder, if ever one was needed after the 1991 bombing of the Military Wing of Musgrave Park Hospital by the Provisional IRA (8), that military medical personnel and their patients are by no means considered sacrosanct or immune to attack by a terrorist organisation. Moreover a second bomb or booby trap specifically designed to maim or kill people, especially skilled personnel, rushing to help those wounded in a first explosion, is a well-recognised terrorist strategy.

Since every military base is a potential target, each military primary health care facility should already have plans to triage, treat and evacuate multiple, seriously injured casualties. The Thiepval bombing made it abundantly clear that this Major Incident Plan should also include plans to operate the medical facility at a secure alternative location.

This includes prior dispersal of assets (e.g. personnel, ambulances and stores). The medical staff should ensure that such plans are regularly practised. This should ideally be in conjunction with local civilian and military hospitals.

Military Hospital.

1. Major Incident Plan. The DCU had, prior to this incident, been in the process of a complete rewrite of Major Incident Plan. Most of its personnel were, as a result, remarkably familiar with the details of this Plan and this familiarity paid off on the day. Regular practice would be as useful.

2. Communications. On this occasion, not surprisingly, the first news the DCU had of the incident was garbled and inaccurate, from a telephone call, with no indication as to whether both bombs had been in Thiepval, or whether there had been any casualties. Nevertheless the Major Incident Plan was activated. Further news soon came in via radio, television, and by phone link with the ambulance services and Lagan Valley Hospital. This experience made it patently obvious that one should not rely on or even expect accurate communication from the scene of such a major incident, and that all sources of information should be used.

3. Triage. It was about one hour before the first casualties arrived at the Triage Area in the DCU. There was then a lull, and the information available led staff to believe that no more casualties would arrive. The Triage area was therefore closed down at this stage. When more casualties arrived without warning, there was a temporary confusion. In fact most of the twenty casualties arrived unannounced at up to four hours after the incident, showing the importance of keeping a Triage Area open and manned for several hours. It must be remembered that patients transferred from other hospitals also require triage, and these are not likely to arrive for some time.

4. Triage Officer. The Triage Officer should be sufficiently experienced to readily differentiate priorities for treatment (priority 1 or 2 for critically or seriously injured casualties, and priority 3 for minor injured). However this person should not have any other potentially conflicting duties, for otherwise he or she may be required elsewhere at short notice, thereby jeopardising a crucial link in casualty management.

5. Flexibility. The Major Incident Plan was activated early at the first indication of serious trouble. It is easier to scale down parts of a Major Incident Plan later when obviously not required than it is to activate it piecemeal or change it in the middle of a crisis. This does not negate the need for flexibility or possible re-assignment of roles, especially as some staff may not be available for some time after the Plan is activated.

6. Casualty Assessment Documentation. The Army Field Medical Card [F/Med/826 Revised(7/94)] had been earmarked for use in the Major Incident Plan at the DCU. This Card is the military equivalent of an assessment and treatment card, and is designed primarily for use in the field at Regimental Aid Post/Dressing Station level.

Unfortunately it was found to be inadequate for use in a hospital setting. Its major failing was that it had originally been designed before the current emphasis on assessing a casualty by Primary and Secondary Surveys according to...
Advanced Trauma Life Support and British Army Trauma Life Support guidelines. As a result of this incident, a simple Casualty Assessment Form based on these guidelines was designed by the Anaesthetic Team at the DCU, and has now superseded the Field Medical Card for such Major Incidents at the DCU. After further validation the authors plan to submit it to be considered for formal adoption by the Defence Medical Services.

7. Discharge Handout. After a successful court action, the Ministry of Defence has recently paid a considerable sum of money in compensation to a soldier who suffered Post Traumatic Stress Disorder after the Falklands War and who claimed that he had not had any critical incident stress debriefing thereafter. As a result of experience with the Thiepval bombing, a Discharge Handout (see Annex A) meant to be issued to all patients discharged from hospital or a medical centre following major trauma or a critical incident has been designed. This incorporates a basic discharge summary (describing injuries sustained, treatment given and recommended, and follow-up arrangements) together with the CISD which was favourably received by hundreds of personnel following this bombing. This Discharge Handout, if formally adopted by the Defence Medical Services for issue after all major incidents, could potentially help avoid the kind of compensation claim detailed above.

Stress Debriefing

In the aftermath of the Thiepval bombing great emphasis was placed on CISD by both hospital staff and community mental health personnel. This reflects the growing realisation amongst medical staff in general of the importance of such intervention following a major traumatic incident (9). This is the first reported incident where such extensive debriefing, involving several hundred people who had all been directly threatened, has been performed within a specified time scale following a terrorist attack (10).

Conclusion

In summary, this article stresses a number of points: the potential for targeting of medical staff and facilities by a terrorist organisation; the importance of a well-rehearsed Major Incident Plan for medical centres and hospitals; the recognition of the need for CISD after major incidents; and the potential value of Casualty Assessment Forms based on ATLS guidelines.

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REFERENCES

ANNEX A
DISCHARGE NOTE FOR PERSONNEL TREATED AFTER MAJOR TRAUMA / CRITICAL INCIDENT

Date of Incident: ........................................ Nature of Incident: ........................................

Time in hospital / med centre: .................... Own G.P.: ........................................

Nature of Injuries sustained: ...........................................................

Treatment given: ...........................................................................

Further treatment required: ............................................................

Follow-up arrangements: ..............................................................

Critical Incident Stress Debriefing: Following involvement in a major trauma an individual may experience a variety of reactions (see below). It must be emphasised that these symptoms are normal reactions to an abnormal event and usually pass within a number of days. If you are still having difficulties after four weeks or if you are concerned then you should contact your G.P. or medical officer.

Common Normal Reactions may include:
- Irritability
- Frustration at not having done better or achieved more
- Recurring memories of the event
- Disappointment
- Feeling anxious
- Feeling angry
- Self-doubt
- Being on edge or watchful; jumpy at sudden noises
- Daydreaming or thinking about the incident
- Some sleep disturbance.

More serious reactions include:
- Distancing oneself and becoming more withdrawn from family and friends.
- Marked sleep disturbance and nightmares that continue in intensity for weeks.
- Behavioural changes, such as having an urge to hide problems through high alcohol intake.

Remember, acute stress reactions may be distressing but are normal, and usually quickly resolve within a very short period.