

CHAPTER 6

COMBAT NEUROPSYCHIATRIC TRIAGE

6-1. Triage

a. Definition and Comparison. Combat NP triage is the sorting of BF, NP and substance abuse cases (including those with physical injury) based on how far forward they can be managed and treated to maximize rapid RTD. Combat NP triage derives from the proven combat psychiatry principles of PIES (Proximity to the unit; Immediacy in initiating treatment for all cases; expressed Expectancy of providing rapid and full recovery; and Simplicity by using simple and short treatment methods.)

(1) Combat NP triage is fundamentally different from surgical triage. Surgical triage divides cases into the categories of Immediate, Minimal, Delayed, or Expectant based on how soon, if at all, they will go to surgery. The Immediate cases go to surgery immediately because any delay is likely to result in death or permanent disability, such as loss of a limb. Minimal cases do not require surgery and can RTD with a minimal investment of time and effort. In surgical triage, stress and psychiatric casualties would all be categorized as Minimal because they never go to surgery. Delayed cases can wait for surgery without suffering increased risk of permanent harm. Expectant cases are not expected to survive, given the amount or type of treatment that is available to give them, so they do not go to surgery at all.

(2) With BF, however, there is a significant increased risk of lifelong psychiatric disability from prolonged delay of treatment, just as there is a risk of physical disability from delay of medical-surgical treatment. Most cases are expected to recover and RTD with prompt and correct treatment, no matter how disabling their symptoms appear. For these reasons, triage officers need to be taught that stress and psychiatric casualties need to be referred for treatment as soon as possible. It should always be remembered

that a small number of NP cases may have weapons and be so potentially dangerous that they deserve the highest priority for management regardless of the type of triage being conducted.

(3) In combat NP triage, diagnostic knowledge, experience, and sound judgment are important at the front end of the process and at the most forward feasible echelon. Interviewing skills are essential if potentially critical mental symptoms, such as paranoid or suicidal ideation and thought disorders, are to be identified. Those symptoms bear directly on safe management. In such cases, diagnosis itself is deliberately deferred. The decision on where to send the case is determined on whether the case can be managed safely for hours to days with simple treatment at the forward echelon. If manageable, they remain with the forward echelon. If they are unmanageable, they are sent rearward only one echelon where the decision process is repeated.

b. Combat Neuropsychiatric Triage Categories. Combat NP triage involves the sorting of cases into categories based on where they can be treated. There are four combat NP triage categories. The four categories are—

- DUTY cases.
- REST cases.
- HOLD cases.
- REFER cases.

(1) DUTY cases return to their original small unit, either for full duty or for light duty with extra rest and replenishment. This option depends on the small unit's mission, resources, and the soldier's symptoms. The triager must, therefore, be familiar with the unit's situation and take that into account.

NOTE

Maneuver units positioned in forward areas must have only personnel who are fit for full duty. Limited or light duty is nonexistent in these units. If BF cases are sent forward to these units, they must be able to perform full duties for their own safety and the safety of the unit.

(2) REST cases are not return immediately to the small unit because the unit cannot provide an adequate environment for rest. REST cases need brief respite, physical replenishment, and less demanding duties for hours to days at a less dangerous or better-resourced setting. These cases do not require close medical or mental health observation or full-time treatment. The respite and replenishment can be provided in a nonmedical CSS element which supports their original unit. This option, too, depends on the resources and mission of the available CSS units as well as on the soldier's symptoms. Someone in the receiving unit must take responsibility for ensuring the soldier is fed, rested, performing some useful work, and kept accounted for. There must be a reliable transportation link to return the soldier to his original unit after a day or two of rest.

(3) HOLD cases are those who do require close medical observation and evaluation because either—

- Their symptoms are potentially too disruptive or burdensome for any available CSS unit or element.

- Their symptoms could be caused by a medical, surgical, or NP condition which could suddenly turn worse and require emergency treatment.

In addition, the resources to provide the necessary medical observation and adequate stabilization or

emergency treatment of the potential emergency must be available at this medical echelon.

(4) REFER cases present problems similar to the HOLD cases, but—

- REFER cases are too disruptive and burdensome for this medical echelon, given its mission and resources.

- This echelon cannot provide the acceptable level of diagnostic and treatment capability if an emergency occurs.

c. *Distinguishing Categories by Signs and Symptoms.* It should be obvious that the four combat NP triage categories are not sharply distinguishable based on the signs and symptoms of the case.

(1) The boundaries of each category are influenced as much or more by the changing tactical situation and the resources available as by the symptoms. The category may change automatically with time or as the case moves through the system. For example, REFER automatically becomes HOLD when the cases reach the echelon which can manage and treat them.

(2) This flexibility is entirely in keeping with the intent of the labeling system for BF soldiers. The intent is to avoid giving BF soldiers a psychiatric label that sticks with them for life. It is also in keeping with the highly changeable nature of BF symptoms. Battle fatigue symptoms tend to become fixed when inappropriately labeled and mistreated.

(3) Like the triage categories in surgical triage, the categories in combat NP triage are brevity codes. Each brevity code (label) summarizes in one word where the case should be managed and what treatment should be received in the immediate short term given the current situation. It has no other meaning and only transitory relevance. Figure 6-1 provides a decision tree or flow diagram for sorting in combat NP triage.

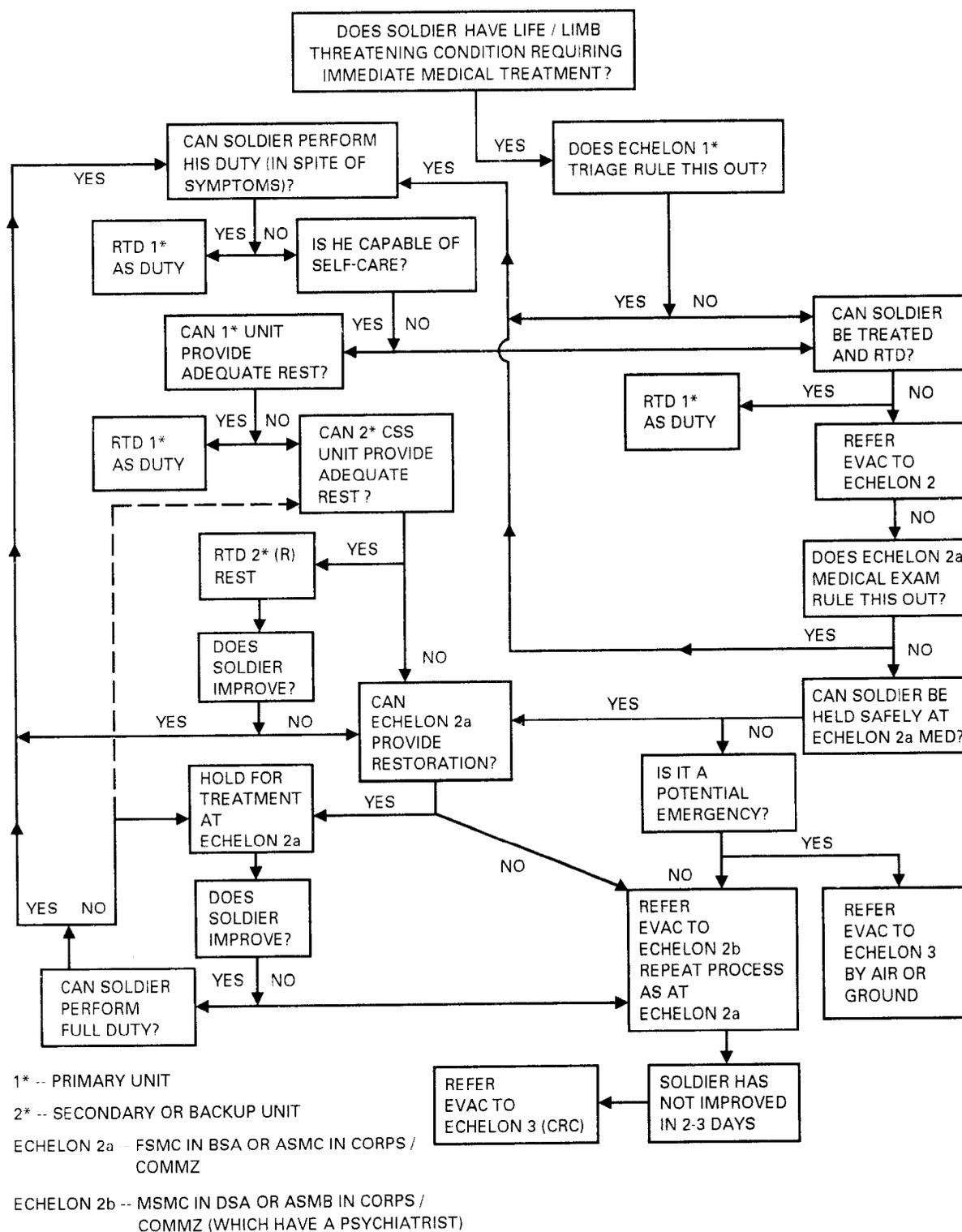


Figure 6-1. Combat neuropsychiatric triage flow diagram.

6-2. Considerations

a. *Importance of Expertise of Medical and Mental Health Personnel.* As noted above, making the diagnosis of specific psychiatric disorders is officially deferred when managing BF. However, the medical and mental health personnel must be alert to the fact that many physical or psychiatric illnesses may resemble BF, yet require specific and even emergency treatment. It may be a matter of life or death to correctly make those diagnoses early. In more severe cases of BF, there is increased difficulty in recognizing such illnesses, and the expertise of medical personnel is particularly important. Either the psychiatrist or the clinical psychologist should make diagnostic evaluations if the present of an NP disorder is suspected or must be differentially diagnosed.

(1) *Physical screening.* All REFER and HOLD cases deserve an adequate review of body systems and a quick physical examination. The examination includes vital signs, head/eyes/ears/nose/throat, chest, abdomen, and extremities with simple testing of reflexes and muscle strength. Negative or normal findings need to be documented on the FMC or according to AR 40-66. Any positive findings from the physical examination should, of course, be evaluated further. If the examiner has not checked various body systems, it is not reassuring to tell a soldier that his physical or mental complaints are "only BF." DUTY and REST cases should also get this brief examination when time and setting allow.

NOTE

Previous observations in FTXs suggest that the physical examination is often neglected for cases who have been labeled stress, BF, or psychiatric. *This undermines the credibility of the BF diagnosis and must not be allowed.*

(2) *Neuropsychiatric screening.* Problem cases will require examination by a physician with NP training. This expertise must be available no further to the rear than the DSA (AR 40-216), and whenever feasible, should be available at the BSA.

(a) All physicians and physician assistants must be able to perform and document neurological screening and mental status examinations in order to identify problem cases.

(b) The other mental health disciplines must also be trained to perform a basic physical screening examination. These personnel include clinical psychologists, social work officers, occupational therapists, and appropriate enlisted personnel.

(3) *Considerations during physical screening.* While a brief physical examination is essential, the clinician must resist the temptation to order tests or procedures that do not directly influence case management. Do not, for example, draw lines on the soldier's skin to document where the changes in sensation occur. Such lines, and medical tests in general, tend to validate and fix the symptoms in the mind of the patient. Needless tests may delay RTD and provide a distinct incentive to remain incapacitated because of secondary gains, especially if there is a chance of evacuation to a safer, more comfortable area.

(4) *Treatment considerations (overtly and covertly).* The work-up therefore should be limited to those essential steps which ensure the medical safety of the soldier and determine whether he can—

- Return to his unit.
- Return to another unit for

rest.

- Receive treatment at this medical facility.
- Be evacuated to the next rearward echelon.

If no threat to life or permanent function is involved, it is often best to treat overtly for BF while monitoring covertly and providing general treatment for the other possibilities.

(5) *Restoring confidence after temporary disability.* As BF is often caused by a combination of mental, physical, and physiologic stressors, there is no need to try to force the soldier to accept emotional rather than physical explanations for his inability to function well. Many soldiers find it easier to recover confidence if they can believe that most of their problems resulted from physical overload. The term BF deliberately covers both sets of causes.

(6) *Ruling out serious medical/surgical causes.* If soldiers who are believed only to have BF must be evacuated to a hospital for diagnostic tests to rule out worse possibilities, they should be told specifically that this is just a precaution. They should be seen immediately on arrival by the hospital psychiatrist and scheduled for the tests as soon as possible. The Principle of Immediacy requires that expedient treatment be provided. Such BF cases are not routine cases and should have priority just below that of soldiers with life- and limb-threatening physical diagnoses. Remember, BF soldiers can suffer lifelong psychological disability as a consequence of delay.

b. *Importance of Recognizing Physical Conditions.* Paragraph 6-3 lists some of the physical conditions which should be kept in mind in the differential diagnoses of BF. Some of these conditions may exist concurrently and be a contributing cause to the BF, but require specific additional treatment.

6-3. Differential Diagnostic Problems

a. *Low-Grade Environmental or Stress-Related Illnesses.* Low-grade environmental or stress-related illnesses drain the soldiers' strength and confidence. Chronic diarrhea and slight fever from subclinical malaria or a virus may exhaust, demoralize, and contribute to BF among soldiers. These conditions should be treated medically, concurrently with the physical replenishment, rest, reassurance and organized activities which restore the soldier's confidence. If they persist in spite of rest and symptomatic treatment, a more aggressive workup and treatment is indicated.

b. *Dehydration.* Dehydration deserves special mention because it can be very subtle. Soldiers under battlefield or heavy work conditions become extremely dehydrated without feeling thirsty. This is especially likely in mission-oriented protective posture (MOPP) and/or arctic gear. In both conditions, it is mechanically difficult to drink. An insufficient circulation of thick, dehydrated blood is less able to carry oxygen to the brain and muscles. This can result in instant BF.

c. *Hyperthermia.* Hyperthermia (overheating) in an otherwise healthy individual often first causes mild elation and excessive energy. This may be followed by irritability, disorientation, and confusion. When core body temperature reaches 105° to 106°F, the soldier may become belligerent, combative, and have visual hallucinations. If brain temperature rises further, the soldier collapses and convulses in heatstroke. These soldiers may require restraints and must be cooled as rapidly as possible. In hot climates, hyperthermia is expected, but it can occur in chemical protective gear (MOPP), cold weather clothing, or during heavy physical work even in temperate and cold climates. As these examples illustrate, hyperthermia is caused by a mismatch between environment, activity, clothing, and shelter.

d. Hypothermia. Hypothermia may cause an individual to become disoriented when core body temperature falls below 94°F. The person may move and speak slowly. His skin looks and feels warm, leading him to take off clothing. He may even resemble a zombie. Hypothermia is as likely in cool, or even warm (night-time), wet climates as it is in extremely cold ones. It is also caused by a mismatch between environment, activity, and clothing or shelter. Heat must be provided to the hypothermic soldier to prevent death. If the soldier is extremely hypothermic, care must be taken to avoid cardiac arrhythmia during rewarming.

NOTE

A simple rule of thumb is: If the soldier is overheated, help him cool off. If there is any possibility he is cold or hypothermic, warm him up. Have him drink cool or warm liquids suitable for the condition since he is probably dehydrated.

e. Overuse Syndromes. Overuse of muscles, joints, and bones that have not been prepared for the strain of field duties can lead to persisting stiffness, pain, swelling, and orthopedic injuries. If severe, these injuries may require evacuation to a hospital for evaluation by an orthopedic surgeon, an occupational therapist, or a physical therapist. Even if these injuries are avoided, the unfit person who overexerts have days of stiffness, aching, and weakness. During this time, such cases are likely to have BF if further demands are made on them. Physical fitness exercises are a regular part of the treatment of BF. For these cases, the exercises should first be limited to warm-up and stretching-type calisthenics.

f. Rhabdomyolysis. Rhabdomyolysis is one potentially dangerous complication of severe

muscle overuse (and of heatstroke or crush injuries) in which myoglobin from damaged muscle cells injures the kidneys. This can cause acute renal failure and death, or chronic renal insufficiency. A warning sign is dark (tea-colored) urine, but without laboratory testing, this is not easily distinguished from the concentrated urine of dehydration. Cases with significant rhabdomyolysis should be evacuated immediately to a hospital. If kidney failure develops, they should be evacuated to CONUS.

g. Head Trauma. Concussion may stun the individual and cause amnesia, residual confusion, and perhaps impulsive behavior. For any case of suspected head trauma and for any case of significant memory loss (especially for a discrete period of time), check scalp, eyes, ears, nose, cranial nerve signs, and vital signs for evidence of head injury. Negative as well as any positive signs are recorded. The main concerns are—

(1) Epidural hematoma (a blood clot forming between the skull and the tough membrane that covers the brain). This is usually due to arterial bleeding, with onset of symptoms of increased intracranial pressure within minutes to a few hours. It can progress rapidly to coma and respiratory arrest.

(2) Subdural hematoma (a blood clot forming between that tough membrane and the brain itself). This is usually venous bleeding with slower onset and progression but can lead to coma and death.

(3) Intracranial pressure with either epidural or subdural hematomas which may become life threatening. If one pupil becomes larger than the other, there is little time left to evacuate the soldier to a hospital. Hyperventilating the soldier can buy time by decreasing blood flood to the brain and temporarily reducing intracranial pressure. An organic or attached

surgical squad may drill burr holes to relieve intracranial pressure. When a surgical squad is not present, these patients are evacuated to the supporting hospital by the most expedient means available.

(4) If a head injury is suspected, continue to monitor mental status and vital signs periodically, especially respiration even though physical findings are negative. Continuous

monitoring would be appropriate if there are serious concerns about the risk. In addition, the soldier is awakened every hour to check and record state of consciousness according to the Glasgow Scale (Table 6-1). Allow sufficient time after awakening for the soldier to recover from the normal sleep inertia (grogginess on awakening). This precaution will only slightly decrease the restorative quality of the sleep which can be made up by letting the soldier sleep longer.

Table 6-1. The Glasgow Coma Scale

EYE OPENING (E)		
SPONTANEOUS OPENING	=	4
OPENS IN RESPONSE TO SPEECH COMMAND	=	3
OPENS IN RESPONSE TO PAIN	=	2
NIL (NO RESPONSE)	=	1
MOTOR RESPONSE (M)		
OBEYS REQUEST TO MOVE SOME PART	=	6
LOCALIZES (MOVES HAND TO TOUCHED PLACE)	=	5
WITHDRAWS PART FROM PAINFUL TOUCH	=	4
ABNORMAL FLEXION (ELBOWS, WRISTS BENT)	=	3
EXTENSOR RESPONSE (ARMS, LEGS STRAIGHT)	=	2
NIL (NO RESPONSE)	=	1
VERBAL RESPONSE (V)		
ORIENTED (ANSWERS TIME, PLACE, PERSON)	=	5
CONFUSED CONVERSATION (MAY BE DISORIENTED)	=	4
INAPPROPRIATE WORDS ("MOTHER," "YESTERDAY")	=	3
INCOMPREHENSIBLE SOUNDS (GROAN, MOAN, SCREAM)	=	2
NIL (NO VOCAL RESPONSE OR SOUNDS)	=	1

NOTE: The Glasgow coma score is the sum of the scores for E, M, and V. The total score can range from 3 to 15, with lower scores indicating deeper coma.

(5) Skull x-rays are unlikely to show evidence of intracranial hematoma in young adults. They may confirm a fracture of the skull, but such a fracture would be highly unlikely in someone who shows no bruises or other signs of a hard blow to the head. If there is significant evidence of a severe blow, with or without skull fracture, patients are evacuated to a hospital with neurosurgical capabilities.

NOTE

A problem with evacuation to a corps hospital is that soldiers are counted as a loss to their units. The personnel replacement system counts soldiers as a loss to their units as soon as they cross the division/corps boundary.

The system does not provide for returning soldiers to their old division, let alone their own platoon, unless such a return is individually coordinated according to the TSOP. If returned to combat in a strange unit, recovered BF or concussion cases, like all other soldiers, will for a time be at high risk for BF or injury. After intracranial hemorrhage has been ruled out at the hospital, transferring the soldier briefly to the CSC reconditioning center (see Chapter 9) may facilitate more selective RTD.

h. Spinal Cord Trauma. Pressure, bruising, and hematomas of the spinal cord, as well as severing of the spinal cord, can cause spinal shock, with loss of sensory and/or motor functions below the level of the injury in the affected dermatome and muscle group patterns. The loss of function may be bilateral, unilateral, or partial. These cases could be confused with paralysis or sensory-loss forms of BF. Further manipulation of a fractured spine can worsen or make permanent the spinal cord damage. Information from the history of onset, a cautious

physical and neurologic examination, or complete relief of symptoms following hypnosis or strong positive suggestions could demonstrate convincingly that this is only BF. It is best to be cautious and keep the spine immobile during care and transportation. Send the soldier to where adequate X rays can be done while still expressing optimism that this may be only temporary BF or spinal bruising.

i. Postconcussion. Postconcussion syndromes may persist weeks to months beyond the period of acute concussion. Postconcussion syndromes may include perceptual or cognitive impairment, poor impulse control, and difficulty in planning ahead. These are often accompanied by cranial nerve deficits or soft neurological signs. If severe and documented by examination or neuropsychological testing, this could weigh against rapid RTD. It may necessitate recommending reclassification and retraining to another duty.

NOTE

Like a concussion case, it is important to return cases who prove to have only BF to their original units if recovery at the CSC reconditioning center is rapid.

j. Abdominal Trauma. Ruptured spleen or other intraperitoneal bleeding may cause shock. The soldier may arrive in a fetal position and be unresponsive but with reflex "guarding" due to peritonitis. A case such as this was misdiagnosed as "catatonia" and sent to an Israeli mental health team in Lebanon as one of over twenty stress cases in a true mass casualty situation. The team checked the vital signs and correctly returned the soldier for emergency surgery.

k. Air Emboli and Focal Brain Ischemia. High blast overpressures from an incoming

high explosive ordnance can produce air emboli (bubbles in the blood) and focal brain ischemia (small areas in the brain which cannot get oxygen because the blood flow has been interrupted). Nuclear explosions can do this, as can high explosives when shock waves are magnified by reflection within bunkers, buildings, and trenches. A few cases die within seconds, perhaps with no other sign of injury, although ruptured eardrums, general trauma, and evidence of pulmonary damage should be detectable. More cases may survive but have stroke symptoms which could run the full range from loss of muscle strength and/or loss of sensation in parts of the body (hemiparesis, hemianesthesia) to mild or major speech disturbances, depending on the size, number, and location of bubbles that are lodged in the body.

(1) Some air emboli may leave areas of permanent brain cell destruction and disability. Other smaller ones may allow considerable or complete recovery of functions in minutes to weeks. This occurs if collateral circulation keeps the cells alive until the bubbles resorb or if neighboring areas of the brain relearn the function. However, even in those who have full and rapid recovery of brain functions, the symptoms may persist as the pure loss-of-functions type of BF. This would be because the soldier's extreme anxiety and internal conflict have been unconsciously relieved by his honorable status as a patient.

(2) Specific treatment, if air emboli are suspected from the history of onset and physical findings, is to assure the best feasible oxygenation of the brain.

1. *Laser Eye Injury.* Today's laser range finders/target designators cause small burns on the retina if they shine directly into the eye, even at great distances and especially if viewed through optics. The fact that lasers travel silently at the speed of light along a line of sight adds new urgency to the saying, "If you can be

seen, you can be hit." However, the second part of the saying, "If you can be hit, you can be killed," is not so true. The flashes of light the person sees may even warn him to take action to evade the missile or bullet that may follow. However, after laser eye injury has happened to several leaders or gunners in a unit or as rumors of it spread, other soldiers who must view the enemy may find their own vision failing for purely psychological reasons. Vision is one of mankind's primary means of relating to the world; it is used by those who have it in performing most tasks. Vision is also the medium for many pleasures. Fear of major degradation of visual acuity and especially total blindness is, therefore, an unusually strong fear. In the imagination of some soldiers, especially those whose careers, activities, and self-image depend on vision, blindness may rank high as a crippling wound which makes a person helpless and an object of pity.

(1) If the laser beam causes a small retinal blood vessel to bleed inside the eyeball, the person will see red. If blood inside the eye is confirmed on examination, these soldiers should be evacuated to a hospital with verbal reassurance that they may RTD soon. If the soldier is seeing red but no blood is confirmed on ophthalmoscopic examination, treat as BF.

(2) If the laser does not hit a blood vessel, the soldier may see only flashes of light, followed quickly by some painless loss of vision. If the damage is peripheral vision, the soldier may never know it. However, if he was looking exactly at the laser source, there will be major loss of visual clarity with no pain. These symptoms may resemble visual forms of BF.

(3) With simple retinal burns, most of the visual symptoms are due to the swelling around the very tiny burns. Much of the vision may recover within hours to days with rest, reassurance, and nonspecific treatment, the same as for BF. The only permanent result may be a

constellation of small black dots in the soldier's visual field or a peripheral visual field defect of which the soldier is unaware.

(4) Treatment following a suspected laser injury is extremely important. Calm, professional treatment at each echelon of medical care is mandatory. Assurance that the injury is not life threatening and that chances for some, if not total, recovery is good. The potential psychological effects of lasers could be enormous. It is imperative that secondary gain for these patient be minimized. This is accomplished by prompt RTD of those individuals with temporary flash-blindness, noncritical (nonfoveal) burns of the retina without hemorrhage, and those who are experiencing purely psychogenic visual loss. If an error is to be made, it should be to RTD questionable injuries, provided the risks are minimal for further injury or accident. Medical management of stress reactions for patients suffering from real or imagined laser injuries is like stress management of other injuries. Repeat the reassurance that symptoms will improve with rest, nutrition, hygiene, and the expectation of an early return to the soldier's unit.

(5) Future development of lasers as deliberate antipersonnel weapons may produce more pain and permanent effects. A high-energy laser weapon could cause the unprotected eye to boil and burst. It could cause burns to exposed skin and set clothes on fire. This would be a considerably more fearsome weapon, although one which makes differential diagnosis of real from psychogenic injury much easier. If these are encountered as a surprise, without adequate preparation and training of the troops, the psychological impact will be magnified. That may produce more cases of BF, some with visual symptoms. Laser-protective eyewear has been fielded; getting soldiers to wear it is an important issue for command and NCO emphasis.

(6) For more information on the threat of laser to the eye, see FM 8-50.

m. Middle Ear Injuries/Diseases. Temporary loss of hearing can be caused by a decreased acoustic sensitivity following a brief extremely intense noise (explosive) or less intense, longer duration noise. Tinnitus (ringing in the ears) can also result from acoustic nerve damage or irritation as well as from high doses of drugs, such as aspirin. Hearing loss or perceiving noises in the ears can also be BF symptoms. Cumulatively, loud noise causes permanent damage to the cochlea, resulting in hearing loss especially for the higher frequencies. This is why routine use of earplugs and ear covers in noisy situations is so important for many (if not all) military occupations. However, there are other combat situations where acute hearing is essential and earplugs cannot be worn. Distinguishing physiologic from psychogenic hearing loss may require that the patient be evaluated by an otolaryngologist (ear, nose and throat specialist).

n. Peripheral Neuropathies. These include compression neuropathies which are especially likely in military settings (for example, rucksack palsy). Depending on severity, they may require temporary job reclassification during convalescence. As they are not life threatening, a hasty diagnosis should not precede a trial of restoration treatment.

o. Uncommon but Endemic Neurologic Disorders. These are physical diseases whose symptoms (at least initially) are primarily mental or behavioral (although eventually documentable by neurological or laboratory examination). Examples include:

(1) Guillain-Barre syndrome (muscle paralysis, usually without sensory loss, which ascends the legs and arms, then the trunk, over hours to days). It is sometimes triggered by immunizations, as might be given to troops deploying overseas. It often progresses to a life-threatening situation as the muscles of respiration become involved. This requires evacuation

to COMMZ and CONUS. Fortunately, recovery is usually complete, but it takes months to years.

(2) Multiple sclerosis. This disease can mimic many types of BF with its sometimes transitory, shifting motor, sensory, speech, and cognitive/emotional symptoms. It is made worse by stress and may be difficult to diagnose. Once confirmed, true multiple sclerosis cases should be evacuated to CONUS, as should other rare, progressive diseases like Lou Gehrig's disease (amyotrophic lateral sclerosis). Multiple sclerosis on the battlefield is not likely to be more common than in any other population of young to middle-aged adults.

(3) True convulsive seizure disorders. This may be a rare sequela of prior RTD head injury or a common sequela of sublethal or chronic nerve agent exposure. These are treated with the normal anticonvulsant medications. If soldiers who are anxious about nerve agent attack observe someone having a seizure, that may trigger an epidemic of purely psychogenic seizures. Pseudoseizure (becoming unconscious, falling down, and shaking all over) sometimes occurs as a BF symptom. The extremely anxious soldiers may also have urinal and fecal incontinence during the pseudo seizure, as loss of bladder and bowel control at times of extreme danger is common. In a civilian setting, incontinence during pseudoseizure is unusual.

P. Substance Misuse/Abuse. These may be examples of misconduct combat stress behaviors but are not necessarily reactions to combat stress. Drug and alcohol abuse are epidemic in US civilian society, especially among adolescents and young adults, and continue to be a problem in the Army in spite of prevention programs.

(1) Heavy habitual use of alcohol, even by otherwise capable officers and NCOs, may go unnoticed in peacetime. However, it may

degrade the increased levels of mission performance demanded by combat or may result in withdrawal symptoms when access to alcohol is interrupted by deployment. Minor alcohol withdrawal is identical to the normal common signs of BF and requires no special treatment. However, it is important to prevent the onset of major alcohol withdrawal if the history or physical findings of chronic heavy drinking suggest that is likely.

(2) Intoxication or withdrawal from alcohol, barbiturates, and tranquilizers may be mistaken for BF; however, these conditions require special treatment. Withdrawal seizures or impending or ongoing delirium tremens need emergency treatment with diazepam, another benzodiazepine, or phenobarbital to stabilize for evacuation and detoxification in a corps hospital. Dosage will be determined by the treating physician.

(3) Overuse of stimulants (such as deliberate abuse or the desire to stay alert) may cause panic attacks, manic hyperactivity, rage attacks, or a condition which closely mimics acute paranoid schizophrenia. Those patients with paranoid psychosis can be treated with standard antipsychotic drugs such as chlorpromazine or haloperidol but may take 7 to 10 days to fully recover. Cessation of amphetamines after prolonged use causes a "crash" (extreme sleepiness, lethargy, overeating) and perhaps even a "crash and burn" with possible serious depression and suicidal thinking. This condition may require 1 to 2 weeks of hospitalization to assure safe recovery,

(4) Hallucinogenic drugs cause sensory distortion, panic, bizarre thoughts, and potentially dangerous actions. These may be employed by the enemy as chemical or biological warfare agents. Phencyclidine hydrochloride (PCP) is especially problematic since it also blocks pain and tends to make those under its influence paranoid, violent, and abnormally strong.

Hallucinogenic drug psychosis should not be treated with antipsychotic drugs. Physically restrain, sedate with diazepam or lorazepam, if necessary, and evacuate for stabilization and further evaluation.

(5) Inhalation of fumes (either by accident or as deliberate abuse) and carbon-monoxide poisoning can cause disoriented, abnormal behavior. Supportive treatment and, in cases such as carbon monoxide poisoning, specific antidotes or medication may be needed.

q. Anticholinergic Delirium. In combat, atropine may be a problem since we equip our troops with atropine injectors to use as first aid against nerve agents. Even 2 milligrams (mg) (one atropine injector) without nerve agent challenge can cause rapid pulse, dry mouth, slightly dilated pupils, decreased sweating (hot, dry, flushed skin), and perhaps urinary retention. In some individuals, 6 mg of atropine (equal to three atropine injectors) may cause hallucination and disorientation (without a nerve agent challenge). Such effects may be more common in sleep-deprived soldiers. Similar effects can also occur from eating certain plants. When soldiers are heat-stressed from exercise, clothing, or exposure to hot, desert, or tropical environments, doses of atropine tolerated well in temperate climates may be even more incapacitating. In the heat-stressed individuals, doses of atropine tolerated well in temperate climates may be seriously incapacitating by degrading the sweating mechanism. Such situations can sharply reduce the combat effectiveness of troops who have suffered little or no exposure to a nerve agent. One dose (2 mg) of atropine can reduce the efficiency of heat-stressed soldiers. Two doses (4 mg) will sharply reduce combat efficiency, and 6 mg will incapacitate troops for several hours.

(1) Stabilization is achieved through reassurance, physical restraints (if require for combative behavior), and supportive

treatment (fluids, cooling). These measures will sustain the soldier until the atropine is cleared in 6 to 18 hours. Do not give chlorpromazine or diphenhydramine as they make the condition worse. Diazepam may be used if sedation is essential. In hot, humid climates, individuals who have inadvertently taken an overdose of atropine and are exhibiting signs of atropine intoxication should have their activity restricted. In addition, these casualties must be kept as cool as possible for 6 to 8 hours after injection to avoid serious incapacitation. Usually, the casualties will recover fully in 24 hours or less from a significant overdose of atropine.

(2) Physostigmine (a rapidly cleared antinerve agent) is the specific antidote for atropine; it must be titrated carefully over hours to avoid overdose or relapse. This may be impractical in mass casualty situations. If available, it can be used to confirm the diagnosis. Physostigmine needs to be given in repeated doses only to those relatively few cases of atropine overdose who are in danger of death from excessive body temperature (heatstroke) or cardiovascular collapse due to the high pulse rate.

r. Anticholinesterases. Nerve agent is an anticholinesterase similar to many insecticides. Low-dose nerve agent exposure may produce miosis (pinpoint pupils) without other signs; this will seriously decrease vision except in very bright light and cause eye pain when attempting to focus. This may take hours to days to improve spontaneously, depending on the degree and type of exposure. Giving atropine eye drops will only relieve the spasm if the soldier has been taking pyridostigmine as a pretreatment; the soldier will then have several hours with very large pupils (bothered by bright light) and will have difficulty focusing on near objects, especially fine details. Evidence gathered from affected insecticide workers suggests that mild personality changes, insomnia with bad dreams, and chronic persistent depressive symptoms (similar to common BF) may

be seen even after use of an antidote. Low-dose nerve agent exposure may lower the seizure threshold of many soldiers. True epileptic seizure cases must be distinguished from those soldiers who may have pseudoseizures and need only treatment for BF.

s. *Endemic "Functional" Major Psychiatric Disorders.* These (especially schizophreniform/schizophrenic disorder, major depression, and bipolar disorder) will continue to occur at approximately the same rate as in peacetime Active and Reserve Component personnel. They should be evacuated to CONUS as soon as they can be distinguished from temporary BF or substance-related conditions with good potential for RTD. However, that cannot be accomplished without some period of observation which approximates the doctrinal restoration treatment for BF. That stabilization must be conducted in a sufficiently secure, structured setting that assures safety for violent or self-destructive behavior. A few soldiers who have been diagnosed with psychiatric disorders by a civilian physician may deploy to the theater. These soldiers may hide the fact that they are taking psychotherapeutic medication to keep the diagnosis off their military record. Once in the theater they may experience a relapse or self-refer themselves to an MTF when their medication supply is exhausted. The evaluating psychiatrist must determine if the soldier can function without the medication. If the soldier requires medication, can he be restabilized on a drug which can be provided in the theater? Can the drug be given without risk of harmful side effects? If the alternatives are not feasible, the soldier must be evacuated out of the theater. The following guidelines are proposed for management of cases with significant symptoms that suggest a major psychiatric disorder:

(1) *Severe retarded or agitated depression with suicidal preoccupation.*

- Survival guilt is common with BF, as are feelings that death would be a relief, would end the suspense, and is so likely that it should be expected. Such cases are unlikely to commit suicide but may fail to take adequate precautions for safety. They may be safer with trusted comrades who can watch out for them (as DUTY BF) than with an unfamiliar CSS unit and categorized as REST BF. If they cannot be held in their own unit, they should be triaged as HOLD rather than REST unless the CSS unit where they are attached can provide close supervision.

- Sleep loss, emotional and physical fatigue with apathy, and loss of appetite can mimic retarded depression. However, the soldier should regain energy, appetite, and perspective quickly with sleep, hygiene, and good A rations.

- Significant anxiety on top of the depression could mimic a severe agitated depression but should also improve quickly with rest in a relatively safe place.

- Serious suicidal intent is more likely in soldiers who have suffered severe disappointment on the home front (Dear John letters) or who have, in fact, committed errors about which they have reason to feel guilty (such as accidental fratricide). While such cases should be treated as BF, special attention should be given to ensure their safety and to work on the underlying problem. Cases with depressive symptoms which do not improve in 1 to 3 days go for 7 to 14 days of reconditioning. Brief hospitalization on the CSH's NP ward with suicide precautions may be necessary for those who are judged dangerously suicidal. If the depression has not improved after being sent for reconditioning in the COMMZ, these cases meet the *Diagnostic and Statistical Manual of Mental Disorders*, Third Edition, Revised (DSM III-R) criterion for major depression (2-weeks duration).

(2) *Predominantly auditory verbal hallucinations and schizophrenic-type thought disorder.*

- This could be due to stimulant misuse in a good soldier or a brief reactive BF in response to extreme stress. This is not a condition which can be managed in a 1- to 3-day restoration program without excessive disruption for the other BF soldiers. The potential risk of an open environment with many loaded firearms is too great. Send this case to a hospital with NP staff for stabilization. If symptoms improve quickly with rest or with anti-psychotic medications, transfer the soldier forward to the reconditioning center to prepare for RTD. If psychotic symptoms persist, evacuate to the COMMZ and CONUS.

- Auditory but nonverbal hallucinations (such as hearing battle sounds, perhaps also with visual hallucination of battle sights) are more likely to be BF with potential for limited RTD in the TO.

(3) *Paranoid delusions without formal thought disorder.* If this follows severe sleep loss, it may clear completely with reassurance and sleep. If it does not, consider the nature of the delusion and the sociocultural context. Is it likely to interfere with mission performance and/or could it lead to inappropriate violent behavior? If yes, HOLD or REFER (evacuate) for further evaluation. If no, RTD with appropriate advice to command or comrades about how to handle to get best performance.

(4) *Manic episode.* This could be due to sleep loss and stress, stimulant misuse, or bipolar disorder. The soldier may be too disruptive to keep at forward locations. If sedations (with physical restraint, if necessary) result in improvement after good sleep, consider RTD. If mania persists, evacuate to next echelon for further evaluation.

t. *Endemic Personality Disorders.*

Preexisting personality disorders may make a soldier unable to adapt to military life. However, numerous studies have failed to show a relationship between personality disorders and the likelihood of breakdown in combat. Even so, once soldiers with personality disorders have become BF casualties, they may have greater difficulty recovering and returning to duty. Those who malingering (deliberately fake illness to avoid duty) must be detected and RTD or have administrative action initiated by the unit.

(1) A documented (DSM III-R) personality disorder which also interferes with the soldier's ability to perform duty is a basis for administrative discharge (Chapter 5, AR 635-200). The responsibility of the evaluating psychiatrist or psychologist is to certify that the soldier's unacceptable behavior is part of a true personality disorder. This is measured by DSM III-R's strict criteria, specifically—

- It is part of a long-standing pattern that has been evident since childhood or early adolescence.

- It is present in other aspects of the soldier's life besides military duties.

- It is inflexible and has not changed in spite of reasonable efforts to correct it.

- It interferes with military duty.

This diagnosis may not be appropriate for someone who is still in adolescence, as may be the case with some basic trainees and first tour soldiers. The lifelong label of a personality disorder as explanation for military discharge must not be applied unless all of the features are present, even though the soldier himself, as well as the commander, may wish to take this easy way out.

(2) In the CZ, it may be difficult to get the long-term occupational and social history needed to truly document that a soldier's behavior is due to a personality disorder and not just to BF or an adjustment disorder. In principle, soldiers should not be medically evacuated from the theater for poor performance or misconduct. If the soldier's emotional or mental state does preclude return to useful duty and command

insists on rapid evacuation, the diagnosis of personality disorder (and recommendation for chapter discharge) may best be deferred for further evaluation in CONUS. In the CZ, command should be unwilling to allow so easy a way home which might encourage malingering. They should require RTD, job reclassification, or disciplinary action, unless true BF is present and does not respond sufficiently to treatment.