DAMAGE CONTROL SURGERY

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- 15 DCS was first described by Rotondo et al ., although the idea of an abbreviated laparotomy for the unwell patient was not totally novel. The concepts of DCS were initially applied to complex trauma patients with combined vascular and visceral - injuries. Improved outcomes were seen following DCS princi - ples compared with conventional definitive surgery . The DCS approach is to restore physiology over anatomy and is typically divided into several phases: /uni25CF Phase 1 . Recognition of injury severity and the need for - damage control principles, both surgical and resuscitative. Features of phase 1 include rapid-sequence induction of anaesthesia and intubation, early rewarming and prompt movement to the operating theatre. /uni25CF Phase 2 . Immediate laparotomy with rapid control of bleeding and contamination, abdominal packing and tem - porary wound closure. /uni25CF Phase 3 . Movement to the intensive care unit (ICU) for ongoing resuscitation with normalisation of biochemical and physiological parameters. /uni25CF Phase 4 . Re-exploration in the operating theatre to per - form definitive repair of all injuries. Multiple procedures on multiple occasions may be required. Even at this stage, non-essential procedures may be truncated or delay ed if physiology deteriorates. may not be straightforward. While various physiological and biochemical markers of injury have been suggested, there is no validated threshold. Hypothermia, coagulopathy , acidosis, blood loss and anticipated operative time should all be consid ered (see Chapters 26 and 27). The benefits of a DCS approach to those patients who need it has been repeatedly shown, but liberal, and perhaps overzealous, use of DCS is unlikely to be beneficial to those who would tolerate definitive repair. DCS puts a heavy toll on thea tre and ICU resources. In addition, multiple trips to theatre may increase the likelihood of morbidity , including abdominal wall hernias, fistulae and infection. Damage control resuscitation (DCR) should be concur rent with DCS. The principles of DCR include permissive hypotension, the avoidance of crystalloid with haemostatic resuscitation and the recognition and management of acute traumatic coagulopathy (ATC). The applica tion of these prin ciples to military patients is uncertain because of longer time lines. Prolonged periods of permissive hypotension are likely 16 to be harmful, whereas haemostatic resuscitation and man agement of ATC is ine ff ectual in the absence of haemorrhage 17 control. DAMAGE CONTROL SURGERY
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