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Comprehensive Trauma Assessment: A Multidimensional Approach to Injury Evaluation, Nursing Interventions, And Patient Care

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Abstract:

Background: Trauma is a leading cause of death worldwide, with major impacts on young adults in the United States. Hemorrhage, cardiopulmonary arrest, and multiple organ dysfunction syndromes are the most common causes of trauma-related deaths. Effective trauma care requires a structured approach to assess, stabilize, and manage injuries promptly. The collaboration between physicians, nurses, and EMS is crucial to the success of trauma management.

Aim: The article aims to explore a comprehensive trauma assessment approach, emphasizing the multidimensional aspects of injury evaluation, nursing interventions, and patient care.

Methods: The trauma assessment process is divided into prehospital, primary, and secondary phases. Prehospital care involves information gathering and team preparation. The primary survey follows the ATLS protocol and focuses on airway, breathing, circulation, disability, and exposure. The secondary survey includes a detailed history, head-to-toe examination, and diagnostic tests. Key medical and nursing interventions are highlighted throughout these phases.

Results: Key findings emphasize the importance of a systematic approach to trauma, starting with early preparation and communication among team members. The primary survey's sequential steps—airway, breathing, circulation, disability, and exposure—serve to stabilize the patient while preventing further complications. The secondary survey ensures comprehensive injury assessment, including often-

overlooked internal injuries. Complications like hemorrhage and shock are managed through targeted interventions, including fluid resuscitation, blood products, and diagnostic imaging.

Conclusion: A thorough trauma assessment, involving collaboration, timely intervention, and effective communication, is crucial for improving outcomes in trauma patients. Structured protocols, such as the ATLS, guide clinicians in managing complex cases while minimizing preventable deaths. Future emphasis should be placed on continuous training for trauma teams to refine skills and improve patient care.

Keywords: Trauma assessment, injury evaluation, nursing interventions, emergency medical services, ATLS protocol, patient care.

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Introduction:

Trauma represents the foremost cause of death globally. In the United States, trauma is the primary cause of mortality among young adults and contributes to approximately ten percent of all deaths across both genders. Annually, the United States witnesses nearly 50 million emergency department visits attributed to trauma. The most prevalent causes of death in trauma victims are hemorrhage, cardiopulmonary arrest, and multiple organ dysfunction syndromes [1]. The assessment of trauma patients necessitates a methodical and organized approach. It is essential that physicians, nurses, and support staff collaborate effectively and communicate seamlessly when attending to trauma victims. The principal objective of trauma assessment is to identify any immediate life-threatening conditions and stabilize the patient.

Technique or Treatment: Prehospital

The trauma assessment process begins even before the patient's arrival. This initial phase involves assembling the care team, ensuring the availability of necessary equipment, and gathering preliminary information. Emergency Medical Services (EMS) should relay details such as the mechanism of injury, vital signs, obvious injuries, any interventions already performed, and, if available, the patient's age and gender. Based on this information, the healthcare team must anticipate potential injuries that could endanger the patient's life. The composition of the trauma team may vary depending on hospital location and staffing, but at a minimum, the team should include a physician and a nurse. Upon the team's assembly and ideally before the patient's arrival, roles should be assigned. A designated leader, typically the physician, must oversee the team's efforts and coordinate decision-making during the patient's evaluation. Other roles may encompass documentation, airway management, intravenous access, monitoring device attachment, and medication administration. The team leader is responsible for directing the process and ensuring efficient decision-making as the patient arrives and throughout the entire assessment period [2]. In parallel with the initial EMS information, it is critical to prepare all necessary equipment, including tools for intubation, cardiac monitoring, intravenous or intraosseous access, and any other interventions likely to be required. Given that additional unforeseen interventions might arise, it is also important to ensure ready access to any supplementary resources.

Primary Survey

Upon the patient's arrival, it is imperative that the environment remains calm. EMS should provide a concise report on the patient and their findings. Depending on the patient's condition, the primary survey may begin concurrently with the EMS report. In such cases, it is crucial to gather all relevant information from EMS before their departure. The Advanced Trauma Life Support (ATLS) protocol, established by the American College of Surgeons, outlines the primary survey sequence: Airway, Breathing, Circulation, Disability, and Exposure (ABCDE).

Airway

Airway obstruction is a significant, preventable cause of death among trauma patients, making it the first step in the primary survey [3]. For conscious patients, airway assessment begins by engaging with the patient directly. Asking the patient for their name can help determine if they are responding appropriately,

indicating airway patency. Airway evaluation also involves a visual inspection of the patient for signs of respiratory distress, listening for abnormal breathing sounds such as stridor, and examining the face, oral cavity, and neck, along with palpating the neck and face for injuries. Potential issues like oral or dental injuries, midface fractures that may complicate intubation, or indications for cricothyrotomy should be noted. For unconscious patients or those unable to protect their own airway, immediate intubation is necessary. If intubation is not feasible, cricothyrotomy should be performed. In cases requiring intubation, cervical spine immobilization must be maintained, and the endotracheal tube must be secured to prevent accidental extubation, a leading cause of morbidity in trauma patients [4].

Breathing

Once the airway is secured or adequately maintained, the focus shifts to the assessment of breathing and ventilation. This includes a visual examination of the chest for injury, observing for paradoxical chest movements, which may indicate flail chest, penetrating injury, or tracheal deviation. Auscultation of the lungs is crucial to detect decreased breath sounds, and palpation of the chest should be conducted to check for signs of crepitus. If tension pneumothorax is suspected, immediate needle decompression or chest thoracostomy is required. Additionally, evaluating oxygen saturation is critical, and ultrasound or chest x-rays may be used as supplementary diagnostic tools to support the physical examination.

Circulation

Circulatory assessment primarily aims to manage hemorrhage and ensure adequate perfusion. Hemorrhage is recognized as the most frequent preventable cause of death among trauma patients [1]. The assessment starts with a visual inspection of the patient for external bleeding or signs of shock, such as pallor. Palpation of the carotid and femoral pulses is essential, and it is necessary to assess for cold, diaphoretic skin. The patient's mental status may also offer insights into the perfusion of vital organs, although this should be interpreted cautiously in patients with suspected head injuries. In cases of external bleeding, immediate efforts should be made to control it through direct pressure. If an extremity is hemorrhaging from an arterial source, a tourniquet may be applied. In the absence of palpable central pulses, further assessment and intervention are required. Critical sites for hemorrhage include the thorax, peritoneal cavity, retroperitoneal space, pelvis, and long bone fractures. The Focused Assessment with Sonography in Trauma (FAST) exam can help identify intra-abdominal hemorrhage. In patients presenting with shock, initial isotonic intravenous fluids are indicated, though blood products are preferred, administered in a 1:1:1 ratio of red blood cells, plasma, and platelets, particularly in patients with ongoing fluid requirements and concerns about hemorrhage [5][6]. It is also essential to consider the possibility of anticoagulation therapy, which may necessitate reversal [7]. Shock in trauma patients may also be secondary to tension pneumothorax, cardiac tamponade, or spinal cord injury. The FAST and extended FAST exams, which include pulmonary evaluations, are valuable in diagnosing cardiac tamponade and pneumothorax. In cases of suspected intrathoracic shock, a thoracotomy may be warranted. Early establishment of adequate intravenous access is crucial, with the placement of two large-bore peripheral IVs or intraosseous access. Additionally, cardiac monitoring should be initiated as soon as feasible.

Disability

Following the stabilization of airway, breathing, and circulation, it is crucial to assess the patient's neurological function. The patient's level of consciousness is typically evaluated using the Glasgow Coma Scale (GCS) [GCS chart]. For individuals with a GCS score of 8 or below, immediate consideration should be given to securing definitive airway control, if not already established. Pupil size and reactivity must be carefully checked, and an assessment of motor function and sensation should be conducted across all four extremities to detect any potential signs of spinal cord injury. It is essential to maintain cervical spine immobilization during this assessment.

Exposure

The final step in the primary survey, exposure, involves removing all of the patient's clothing to facilitate a thorough inspection for signs of trauma such as gunshot wounds, stab wounds, abrasions, lacerations,

ecchymosis, or any other visible injury. It is paramount to ensure the patient remains warm during this process, as hypothermia may lead to multiple organ failure [8].

Secondary Survey

After the patient has been stabilized and immediate surgical interventions are not necessary, a secondary assessment is conducted. This involves gathering a more detailed history, performing a comprehensive head-to-toe examination, and conducting diagnostic tests. Commonly overlooked diagnoses during this phase include blunt abdominal trauma with internal organ damage, penetrating abdominal trauma, thoracic penetrating injuries, and extremity injuries such as fractures and compartment syndrome [9]. The secondary history should encompass the patient's medical history, previous surgeries, medications, and allergies. Additionally, if feasible, the specifics of the traumatic event—such as speed, seatbelt use, object damage, or the height of a fall—should be considered. For penetrating trauma, it is crucial to determine the type of object that caused the injury, its dimensions, and, where applicable, the number of gunshots heard. The patient's medication profile, particularly the use of anticoagulants or antiplatelet drugs, must be reviewed as these can significantly influence the body's response to hemorrhage.

The head-to-toe examination starts with the head and face, looking for lacerations, abrasions, foreign bodies, bone fractures, or midface instability. The ears should be inspected for hemotympanum, tympanic membrane rupture, blood within the canal, and external trauma. The eyes must be checked for papilledema, globe rupture, unequal pupils, abrasions, or foreign bodies. The nose should be examined for bleeding or septal hematoma, and the mouth must be evaluated for dental injuries, bleeding, or obstruction in the posterior oropharynx. The neck examination should include palpation for bone injuries, crepitus, tracheal alignment, lacerations, hematomas, and abrasions, all while maintaining cervical spine immobilization. Upon completing the neck assessment, attention shifts to the chest, where inspection and palpation should be performed to identify deformities, bruising, penetrating wounds, crepitus, or signs of flail chest. The presence of flail chest suggests a significant underlying lung injury that may impair respiration. Auscultation of lung sounds should be carried out meticulously across all lung fields, with attention to the respiratory rate, use of accessory muscles, or any inspiratory retractions, all of which may indicate difficulty with breathing.

Next, the abdomen should be thoroughly examined for distension, tenderness, signs of penetrating injuries, abrasions, bruising, or the characteristic seatbelt sign. The back and flanks should also be evaluated for any abnormalities, with particular attention to bilateral flank bruising or bruising around the umbilicus, which may suggest retroperitoneal hemorrhage. A rectal exam and genitourinary assessment are also critical during the secondary survey. Any presence of blood or injury in the perineal region should be documented, and careful inspection of the genital area for bleeding, ecchymosis, or lacerations is necessary. A Foley catheter may be indicated, but its insertion should be avoided if blood is observed at the meatus until further evaluation can be performed. The musculoskeletal examination involves a thorough assessment of all four extremities, checking for signs of pain, temperature changes, or tension that might indicate compartment syndrome. Extremities should be examined for pallor, which could suggest blood loss, or cyanosis, indicating inadequate oxygen perfusion. Additional findings to look for include bruising, lacerations, abrasions, open fractures, bone deformities, or ongoing bleeding. The pelvis should be palpated to assess stability, and careful examination of the back, including palpation for step-offs along the spine and signs of bruising or bony tenderness, should be performed while maintaining spinal precautions. A complete neurological exam should include testing the cranial nerves, strength, sensation, coordination, and reflexes. During the secondary survey, imaging studies such as X-rays may be indicated to evaluate the lungs, pelvis, or other painful areas. CT scans are typically used to assess internal head injuries, cervical spine injuries, internal thoracic or abdominal injuries, and pelvic fractures. However, patients who are hemodynamically unstable should not be moved out of the resuscitation area for imaging until their condition stabilizes.

Complications

There are several critical pitfalls to avoid in trauma patient evaluation. If a patient's condition deteriorates during the evaluation process, it is imperative to halt the assessment and revisit the ABCDE sequence. This approach is most likely to identify any life-threatening issues. Additionally, it is essential to avoid becoming overly focused on obvious injuries, such as burns or open fractures, and thus neglecting the primary ABCDE survey. Another common mistake is sending a hemodynamically unstable patient out of the resuscitation area for imaging studies such as X-rays or CT scans. Delaying the transfer of the patient to a higher level of care for testing or non-essential procedures should also be avoided. If the need for transfer is identified, the process should be initiated promptly.

Clinical Significance

Traumatic injuries are commonly encountered in emergency departments, making it crucial for healthcare professionals to be well-versed in trauma assessment protocols within their respective clinical settings. A systematic and meticulous approach to trauma evaluation significantly contributes to the reduction of both morbidity and mortality rates.

Enhancing Healthcare Team Outcomes

The management of trauma patients is inherently a collaborative endeavor that necessitates efficient organization and seamless communication among the healthcare team. Inadequate patient outcomes often arise from missed diagnoses, communication failures, and a lack of situational awareness. To mitigate diagnostic oversights, healthcare providers should adopt a worst-case scenario mindset, listen attentively to Emergency Medical Services (EMS) reports (while acknowledging the potential for inaccuracies), continuously reassess the patient, foster cooperation with all trauma team members, and remain flexible with initial diagnoses. To prevent communication breakdowns, it is imperative to designate a single team leader responsible for task delegation and maintain an updated overview of the patient's condition and treatment plan. The team leader must ensure that new developments and patient stability changes are communicated to all members. Moreover, closed-loop communication should be enforced at all stages of care. Maintaining situational awareness is equally crucial; the team leader should encourage team members to promptly voice any concerns or abnormal findings. Constant patient monitoring, along with periodic reassessments, is pivotal for sustaining situational awareness [10]. The trauma assessment process commences before the patient's arrival, involving the collection of pertinent information, assembling the trauma team, and preparing necessary equipment. Upon the patient's arrival, the team conducts the primary survey, addressing the patient's airway, breathing, circulation, disability, and exposure. Once the patient is stabilized and if no immediate surgical intervention is required, the secondary survey is initiated. This stage involves a comprehensive history and physical examination to ensure no injuries are overlooked. Patient outcomes can be enhanced by effective teamwork and clear communication, with one designated team leader guiding the trauma assessment and ensuring that closed-loop communication is adhered to throughout the process [11].

Nursing Interventions:

The nursing team plays a pivotal role in the trauma assessment process. Prior to patient arrival, the nursing staff is assigned specific responsibilities, and it is essential for each member to fully understand their role and prepare accordingly. Typical nursing responsibilities include documentation, monitoring cardiac function, obtaining vital signs, establishing intravenous access, conducting glucose level checks, drawing laboratory samples, performing electrocardiograms, administering medications, and assisting in CPR. If a nurse is assigned a task that is beyond their capacity, they must promptly inform the physician to facilitate a reassignment of duties. Upon the patient's arrival, nursing staff should immediately engage in their designated tasks. When administering medications, the nurse must verbally confirm the drug name, dosage, and route of administration both before and after the medication is given. The nurse documenting the patient's care must maintain an accurate log of all examination findings, interventions, and the timing of each action. Effective patient outcomes can be significantly improved when nurses actively confirm

instructions before performing any actions, thereby ensuring communication accuracy and treatment precision. Additionally, nurses should voice any concerns or suggestions that may contribute to the patient's care.

Nursing Care Plans and Nursing Assessments:

Nursing care plans and nursing assessments are foundational elements in providing comprehensive, patient-centered care. They serve as vital tools for guiding clinical decision-making, ensuring consistency in care delivery, and promoting optimal health outcomes. These components of the nursing process are designed to assess, plan, implement, and evaluate the care required for individual patients. Through systematic assessments and the development of tailored care plans, nurses can address the unique needs of each patient, enhance recovery, and mitigate potential complications.

Nursing Assessments

Nursing assessment is the initial and crucial phase of the nursing process. It involves the systematic collection of data regarding a patient's physical, psychological, social, and spiritual condition. The purpose of the assessment is to gain a holistic understanding of the patient's health status and to identify actual or potential health problems. A comprehensive assessment includes both subjective and objective data. Subjective data refers to the patient's reported experiences, symptoms, feelings, and concerns, while objective data is gathered through direct observation, physical examination, and diagnostic tests. The assessment process also includes health history, family history, and a review of systems. Nursing assessments are typically organized into categories to ensure that all relevant aspects of a patient's condition are considered. These include the physical examination of systems (such as respiratory, cardiovascular, gastrointestinal, and neurological), the psychosocial evaluation of the patient's emotional and mental health, and cultural assessments that might influence healthcare delivery. It also involves evaluating environmental factors that might affect the patient's recovery, including social support, home care capabilities, and access to healthcare resources. In trauma care, the nursing assessment follows a structured approach, often initiated with the primary survey (ABCDE - Airway, Breathing, Circulation, Disability, Exposure) and followed by a detailed secondary survey to rule out hidden or less obvious injuries. Nursing assessments are dynamic and ongoing, as patient conditions can change rapidly. Thus, the assessment process must be continually updated based on the patient's response to treatment and any new information gained throughout the clinical course. The comprehensive nature of nursing assessments ensures that healthcare providers can detect complications early and modify care plans accordingly.

Nursing Care Plans

Once a thorough assessment is completed, the next step in the nursing process is to develop a nursing care plan. A nursing care plan is a written guide that outlines the specific care needs of the patient, the interventions to address those needs, and the expected outcomes. It serves as both a roadmap for the nurse's actions and a means of communicating these actions to other healthcare providers involved in the patient's care. A well-constructed care plan enhances coordination and continuity of care, ensuring that each healthcare team member is aware of the patient's needs and progress. The development of a nursing care plan typically involves several key components: assessment, diagnosis, planning, implementation, and evaluation. First, the assessment phase involves gathering data about the patient's physical, emotional, social, and environmental status, as mentioned previously. Based on this assessment, the nurse formulates nursing diagnoses, which are clinical judgments about the patient's response to health conditions or life processes. These diagnoses guide the selection of nursing interventions.

The planning phase involves setting specific, measurable, achievable, relevant, and time-bound (SMART) goals. These goals should be tailored to the patient's unique needs and based on the nursing diagnoses. Goals may be short-term (e.g., stabilizing vital signs) or long-term (e.g., promoting recovery from surgery or managing chronic conditions). Planning also includes identifying appropriate nursing interventions, which are actions taken by the nurse to help the patient achieve the established goals. These interventions may include administering medications, providing wound care, offering emotional support, educating the

patient about self-care, and coordinating with other healthcare professionals. The implementation phase focuses on executing the nursing interventions. It is essential for nurses to continually reassess the patient's response to these interventions and modify them as necessary. In trauma situations, for example, nurses must adjust care plans quickly in response to changes in the patient's condition, such as deteriorating vital signs or new injuries. The final phase of the nursing care plan is evaluation. This step involves reviewing the patient's progress toward the established goals. Nurses assess whether the interventions were effective and if the goals have been met. If the goals were not achieved, the care plan is revised, and new interventions are implemented as necessary. This evaluation ensures that care remains patient-centered and responsive to the patient's evolving needs.

Importance of Nursing Care Plans and Assessments

Nursing assessments and care plans are central to ensuring high-quality care and improving patient outcomes. They provide a structured approach to patient care that prioritizes individual needs while promoting effective communication among healthcare providers. By conducting thorough assessments and developing personalized care plans, nurses can identify potential health problems early, reduce the risk of complications, and provide timely interventions. Moreover, nursing care plans facilitate continuity of care by ensuring that all team members are working toward the same goals, thus optimizing the care delivery process. The ability to adapt nursing care plans as patient conditions change is critical, especially in dynamic clinical environments such as emergency or trauma care settings. Nurses must remain flexible and proactive, continuously reassessing both the patient's status and the care plan itself. Collaboration among the interprofessional team is also key to the success of care plans, ensuring that the patient's physical, psychological, and social needs are addressed holistically. In conclusion, nursing assessments and care plans are integral components of the nursing process. The assessment process allows nurses to gather the necessary data to understand the patient's condition fully, while the care plan provides a systematic framework for delivering care that is tailored to the patient's needs. Both are dynamic processes that must be regularly updated and adapted to ensure optimal patient outcomes. Effective nursing assessments and care plans, when executed with attention to detail and collaboration, enhance the overall quality of care and contribute to improved patient recovery and satisfaction.

Conclusion:

The article outlines a comprehensive, systematic approach to trauma assessment, focusing on injury evaluation, nursing interventions, and patient care. The initial prehospital phase sets the foundation for effective trauma management, ensuring that key information about the patient's condition is communicated before arrival. This facilitates optimal team preparation and reduces delays in treatment. The primary survey follows the ATLS protocol, a globally recognized standard for trauma care. By evaluating airway, breathing, circulation, disability, and exposure (ABCDE), trauma teams can quickly identify and address life-threatening conditions, thereby improving the chances of survival and recovery. The critical role of nursing interventions is emphasized throughout the trauma care process. Nurses, alongside physicians, play an integral part in performing assessments, managing airway and ventilation, and administering medications. Nursing interventions during the primary and secondary surveys are essential in stabilizing the patient, managing hemorrhage, and monitoring vital signs. Moreover, continuous reassessment is crucial for detecting any changes in the patient's condition that could indicate deteriorating health, prompting immediate intervention. The secondary survey serves as a comprehensive evaluation phase, allowing clinicians to examine the patient's entire body for injuries that may not have been immediately apparent. This thorough assessment helps identify internal injuries such as organ damage, fractures, or compartment syndrome, which are often overlooked during the initial trauma evaluation. Diagnostic tests, including imaging and laboratory work, provide essential information for making informed decisions about further interventions, such as surgery or intensive care. One of the article's significant takeaways is the importance of communication within the trauma team. Inadequate communication can lead to missed diagnoses and delayed treatments, ultimately worsening patient outcomes. By designating a team leader and maintaining clear, closed-loop communication, trauma teams can work together efficiently, ensuring that all aspects of the patient's condition are addressed promptly. In

conclusion, the multidimensional approach to trauma assessment outlined in the article provides a structured framework that, when followed diligently, can significantly reduce morbidity and mortality rates in trauma patients. Enhanced coordination and training for healthcare teams will further refine trauma care, enabling better outcomes for patients in critical condition. Continuous improvement in protocols and team collaboration is key to enhancing the overall effectiveness of trauma care in emergency settings.

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التقييم الشامل للإصابات: نهج متعدد الأبعاد لتقييم الإصابات، التدخلات التمريضية، ورعاية المرضى

للخص:

الخلفية: يُعدُّ traumaسببًا رئيسيًا للوفاة في جميع أنحاء العالم، وله تأثيرات كبيرة على البالغين الشباب في الولايات المتحدة. النزيف، التوقف القلبي الرئوي، ومتلازمات الفشل العضوي المتعدد هي الأسباب الأكثر شيوعًا للوفاة المرتبطة ب .trauma تتطلب الرعاية الفعالة للإصابات نهجًا منظمًا لتقييم الإصابات، واستقرار الحالة، وإدارتها بسرعة. التعاون بين الأطباء والممرضين وخدمات الطوارئ الطبية هو أمر بالغ الأهمية لنجاح إدارة الإصابات،

الهدف: يهدف المقال إلى استكشاف نهج شامل لتقييم الإصابات، مع التركيز على الأبعاد المتعددة لتقييم الإصابات، التدخلات التمريضية، ورعاية المرضى. الأساليب: ينقسم عملية تقييم الإصابات إلى مراحل ما قبل المستشفى، والمرحلة الأولية، والمرحلة الثانوية. تتضمن الرعاية قبل المستشفى جمع المعلومات وتحضير الفريق. يتبع المسح الأولي بروتوكول ATLS ويركز على مجرى الهواء، والتنفس، والدورة الدموية، والعجز، والتعرض. تشمل المرحلة الثانوية التاريخ التفصيلي، وفحص من الرأس إلى أخمص القدمين، والفحوصات التشخيصية. يتم تسليط الضوء على التدخلات الطبية والتمريضية الرئيسية خلال هذه المراحل.

النتائج: تشير النتائج الرئيسية إلى أهمية نهج منظم للإصابات، بدءًا بالتحضير المبكر والتواصل بين أعضاء الفريق. تعمل الخطوات المتسلسلة للمسح الأولي - مجرى الهواء، والتنفس، والدورة الدموية، والعجز، والتعرض - على استقرار حالة المريض مع الوقاية من المضاعفات المستقبلية. يضمن المسح الثانوي التقييم الشامل للإصابات، بما في ذلك الإصابات الداخلية التي غالبًا ما يتم تجاهلها. يتم إدارة المضاعفات مثل النزيف والصدمات من خلال التدخلات المستهدفة، بما في ذلك الإنعاش بالسوائل، ومنتجات الدم، والتصوير التشخيصي.

الخاتمة: يعد التقييم الشامل للإصابات، الذي يتضمن التعاون، والتدخلات في الوقت المناسب، والتواصل الفعال، أمرًا بالغ الأهمية لتحسين نتائج المرضى المصابين بالإصابات. توجه البروتوكولات المنظمة، مثلATLS ، الأطباء في إدارة الحالات المعقدة مع تقليل الوفيات القابلة للتجنب. يجب أن يركز المستقبل على التدريب المستمر لفرق الإصابات لتحسين المهارات وتحسين رعاية المرضى.

الكلمات الرئيسية: تقييم الإصابات، تقييم الإصابات، التدخلات التمريضية، خدمات الطوارئ الطبية، بروتوكول ATLS ، رعاية المرضى.