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CASE REPORT ON RTA WITH SPLENIC INJURY

Nursing

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ABSTRACT

Road Traffic Accidents (RTAs) frequently result in splenic injuries, ranging from minor lacerations to complete ruptures, which can lead to life-threatening internal bleeding. The spleen, a highly vascular organ, plays a crucial role in immune function, making its injury a significant concern. This retrospective study at King Fahad University Hospital (KFUH) in Saudi Arabia analyzed 921 RTA cases from 2022, revealing a higher prevalence among young males, with significant seasonal variations. Diagnostic assessments, including imaging, laboratory tests, and histopathology, confirmed splenic trauma and associated injuries like hemoperitoneum, fractures, and head trauma. Management involved a multidisciplinary approach, prioritizing hemodynamic stability, with non-operative management for stable patients and surgical intervention, including splenectomy, for severe cases. Post-surgery, patients received intensive care, antibiotics, ventilatory support, and rehabilitation, with psychological assistance for long-term recovery. The study underscores the importance of timely diagnosis and a comprehensive treatment strategy to reduce RTA-related morbidity and mortality.

KEYWORDS

fractures, and head trauma, abdominal trauma ,splenectomy, hemoperitoneum ventilatory support

INTRODUCTION:

Road traffic accidents (RTA) are a major public health dilemma affecting countries all over the world. Road traffic injuries (RTIs) refer to injuries resulting from the complex and nonlinear interaction between humans, vehicles, and the environment. RTAs result in a tremendous burden on the healthcare systems of varying countries, with some studies stating that RTAs are, in fact, the main cause of all trauma admissions to hospitals worldwide .findings are Of 398 patients evaluated, 359 (90.2%) sustained penetrating while 39 (9.8%) had blunt abdominal injuries. Gunshot was the most common mechanism, accounting for 248 (62.3%) cases, followed by stab wound (95, 23.9%). Armed robbery attack (68, 27.4%) was the main source of gunshot wounds. Overall, annual rates showed a four-fold rise over an eight-year period from 24 cases (6.0%) in 2013 to 96 (24.1%) in 2020. Majority (365, 91.7%) had operative management (OM); the rest (33, 8.3%) were treated non-operatively. Morbidity and mortality rates for operative cases were 29.6% and 12.1% respectively.

The main factors associated with increased mortality rates were delayed presentation ($p = 0.002$), bowel resection ($p = 0.006$), gunshot wounds ($p = 0.013$), advanced age ($p = 0.033$), multiple visceral injury ($p = 0.034$) and ASA score $\geq$ III ($p = 0.001$).(1) according to oman medical journal To Study the histopathology of spleens with a history of traumatic rupture with a view to establish possible predisposing factors to the rupture of the spleen can occur spontaneously or due to trauma. The incidence of traumatic rupture of the spleen increases due to rise in automobile accidents. Some studies have considered spleens affected by trauma to be normal and have used such spleens as control specimen in their studies. On the other hand, many studies have shown that there is an increased amount of white pulp in spleens from patients with traumatic injury. This has led to the speculation that in many cases of traumatic rupture, there could be a predisposing factor. In order to evaluate this in detail, this study reviewed the history and records of all splenectomy specimens received at the department of histopathology from 1st January 2003 to 31 December 2007.(2)according to journal of emergencies trauma and shock An epidemiological study on pattern of thoraco-abdominal injuries sustained in fatal road traffic accidents of Bangalore: Autopsy-based study said that The statistical profile reflects a global estimate of 5.1 million deaths in 2000, which was due to injuries that accounted for 10% of deaths due to all causes. Out of this, a quarter of injury-related deaths occurred in the South-East Asian region. Road Traffic Accident (RTA) is one among the top 5 causes of morbidity and mortality in South-East Asian countries. Most common cause of blunt abdominal trauma in India is road traffic accident followed by pedestrian accidents, abdominal blows, and fall from heights. Aims: To analyze the epidemiology and pattern of fatal thoraco-abdominal injuries in road traffic accidents.& result is The majority of the victims were aged 21 to 40 years, 50 (50.0%), most of the victims were male 92 (92.0%); and male/female ratio was 11.5:1. Commonest offending agents in heavy motor vehicles were 54 (54.0%). Bony cage sustained injuries were observed in 71; out of this, fractures of ribs were observed in 45 (63.3%) victims, clavicle in 14 (19.7%), sternum was 6 (8.4%), and vertebrae 6 (8.4%) of fatal road traffic accidents. Internal thoracic injuries were observed in 26 cases. Among internal thoracic injuries, lungs were the most commonly involved organ 24 (92.3%) followed by the heart 2 (7.6%). Lung sustained more lacerations 19 (79.1%) than contusions 5 (20.8%). Internal abdominal injuries were observed in 49 cases. In road traffic accidents, the most commonly injured abdominal organs were solid organs such as liver 16 (32.6%) followed by spleen 9 (18.3%).(3)according to emergency medical journal Trauma calls: role of the general surgeon and CT scanning General surgeons are required in only a minority of trauma call cases to assess for abdominal injuries.

Computed tomography (CT) accurately detects blunt abdominal injuries and may have replaced the need for general surgeons at trauma calls. This study evaluated the role of general surgeons at trauma calls and assessed use of CT in cases of suspected abdominal trauma. Result is that there were 73 trauma calls and the mechanism of injury in most cases was a road traffic accident (RTA). Most patients had orthopaedic and/or neurosurgical injuries. The general surgeons assessed 22 trauma call patients. Abdominal injury was excluded in 13 (four by clinical examination and nine following CT). (*b*) Forty three patients fulfilled the criteria for a trauma call and 14 trauma calls were made. The mechanism of injury in most was RTA and most had orthopaedic and/or neurosurgical injuries. The general surgeons assessed 10/43 potential trauma call patients, and abdominal injury was excluded in five (one by clinical examination and four following CT).(4)according to Iranian journal of public health How Vulnerable Are the Elderly in Road Traffic-Autopsy Study The aim of this study was to analyze characteristic and pattern of road traffic injuries in this special aging group, as well to examine the relevance of certain injuries or risk factors to outliving the injuries. Result is we included 213 (32%) elderly participants out of all 665 RTA subjects who died from sustained injuries or complications of the injuries. The majority of elderly subjects (61%) were pedestrians, and elderly participants in

RTA were more likely to survive the injuries. The most common injuries among the elderly in all group of participants were chest injuries 81% (and among them, rib fractures were present in 76%). Cranio-cerebral injury is the most common cause of death in RTA subjects, singular (45%) or in combination with other causes. In the group of elderly RTA subjects complication of injury is represented in 36 subjects (17%), while as cause of death is represented in 22 subjects (10%). Elderly are less likely to have positive BAC, and even in cases when BAC was increased, the levels were on the lower scale.(5)according to World Journal of Emergency Surgery Management of liver trauma in urban university hospitals in India: an observational multicentre cohort study Low- and middle-income countries (LMICs) contribute to 90% of injuries occurring in the world. The liver is one of the commonest organs injured in abdominal trauma. This study aims to highlight the demographic and management profile of liver injury patients, presenting to four urban Indian university hospitals in India. A total of 368 liver injury patients were analysed. Eighty-nine percent were males, with road traffic injuries being the commonest mechanism. As per WSES liver injury grade, there were 127 (34.5%) grade I, 96 (26.1%) grade II, 70 (19.0%) grade III and 66 (17.9%) grade IV injuries. The overall mortality was 16.6%. Two hundred sixty-two patients (71.2%) were managed non-operatively (NOM), and 106 (38.8%) were operated. 90.1% of those managed non-operatively survived.(6) according to Protein Degradation by Gamma herpes virus RTAs: More Than Just Viral Trans activators Kaposi's sarcoma-associated herpes virus (KSHV) is a member of the Gamma herpes virus subfamily that encodes several viral proteins with intrinsic E3 ubiquitin ligase activity or the ability to hijack host E3 ubiquitin ligases to modulate the host's immune response and to support the viral life cycle. This review focuses specifically on how the immediate-early KSHV protein RTA (replication and transcription activator) hijacks the host's ubiquitin–proteasome pathway (UPP) to target cellular and viral factors for protein degradation to allow for robust lytic reactivation. Notably, RTA's targets are either potent transcription repressors or they are activators of the innate and adaptive immune response, which block the lytic cycle of the virus. This review mainly focuses on what is currently known about the role of the E3 ubiquitin ligase activity of KSHV RTA in the regulation of the KSHV life cycle, but we will also discuss the potential role of other gamma herpes viral RTA homologs in UPP-mediated protein degradation.(7) according to International journal of general medicine Splenic Artery Embolization in Conservative Management of Blunt Splenic Injury Graded by 2018 AAST-OIS: Results from a Hospital in Vietnam This study was conducted to evaluate the results of conservative management of blunt splenic trauma according to the American Association for the Surgery of Trauma-Organ Injury Scale (AAST-OIS) in 2018 by embolization. According to the 2018 AAST-OIS, 27 cases had higher grades than they did according to the 1994 AAST-OIS. The grades of two cases of grade II increased to grade IV; those of 15 cases of grade III increased to grade IV; and four cases of grade IV increased to grade V. As a result, all patients underwent successful splenic embolization and were stable at discharge. No patients required re-embolization or conversion to splenectomy. The mean hospital stay was 11.8±7 days (range, 6–44 days), with no difference in length of hospital stay among grades of splenic injury ($p > 0.05$) (8)

Patient Information

A 50-Year-Old Male Patient, Mr. Navtosh Minal Roy, Was Admitted To A.V.B.R.H. Hospital, Sawangi Meghe, Wardha, On December 19, 2023, Following A Road Traffic Accident (RTA) On December 16, 2023,.main symptoms of this disease is blunt trauma and splenic injury produce following sign and symptoms Hypovolemic Shock, Tachycardia, Pale Skin, Lightheadness Or Dizziness, Abdominal Distension, Bruising, Nausea ,And Vometting ,Rigid Abdomen Developed.severe sign and symptoms produced due to road traffic accident Resulting In Multiple Traumatic Injuries, Including A Splenic Injury, Head Injury, Subdural Hematoma (SDH), Hemothorax, Hemoperitoneum, Left-Hand Fracture, Chest Compression, And Pelvic Compression. Upon Admission, The Patient Presented With Stable Vital Signs But Showe Signs Of Internal Bleeding, Abdominal Collection, And Left Upper Quadrant Pain. Blunt Trauma and Splenic Injury developed clinical laboratory diagnostic findings done this is

USG Impression:-

gas build-up in the belly, fluid in the abdomen and pelvis, fluid collection at the suture site in the subcutaneous plane of the upper abdomen, and the presence of plural effusion in the patient.

Antibiotic Sensitivity Reports Impression:-

Elite genta withstand-resistant Vancomycine: sensitive; linezolid: intermediate Refractory to ampicillin, resistant to penicillin. The purpose of the culture report was to determine whether the patient had a bacterial infection. Growth of Enterococcus caecum is the impression.

Histopathology Impression:

Histopathology reveals ischemia necrosis with inflammatory cells and fibrous fatty tissue in the hemorrhagic portion of the pancreas, but otherwise the tissue is unremarkable. A section of a normal-looking area with histology reveals fibrofatty tissue; otherwise, it is ordinary.

Ct Abdomen Impression:

The posterior wall of the stomach is where gastric perforation occurs. Accumulation of free fluid in the pelvis and abdomen.

ERCP Impression:

Liver cancer, pancreatitis, obstruction or stones in the liver, or unexplained stomach pain are among the conditions for which an ERCP is performed. Conclusion: a persistent perforation of the stomach mucosa was found.

CBC Count, Impression:

A complete blood count, or CBC count, can be used to determine the source of symptoms, including weakness, exhaustion, and fever, as well as the cause of swelling, pain, bruises, bleeding, or changes in the count of blood cells.

ABG Analysis Impression:

ABG analysis was performed. -Hb:14.3%, MCHC:33.3, HCT:42.8, Granulocyte:-80, Lymphocyte:-15RDW:16.5, Eosinophils: 00 ECG A physician diagnosed RTA with splenic damage following a comprehensive diagnostic assessment. Exploratory distal pancreatectomy and splenectomy performed during laparotomy .all laboratory investigations done patient diagnosed as RTA with splenic injury surgeon prescribe following treatment including sedation, sedation is given because of Sedation is given to patients to help them feel relaxed, comfortable, and sometimes even sleepy during medical or dental procedures, reducing pain, anxiety, and potentially unpleasant memories. Ventilation support, ventilator support given because of Ventilator support, or mechanical ventilation, is given to individuals who cannot breathe adequately on their own due to conditions like respiratory failure, severe illness, or during surgery, allowing the machine to take over the breathing process and support oxygen delivery. and a propped-up propped up position given because of Propping oneself up or adopting an upright posture (like the orthopneic position) helps with dyspnea (shortness of breath) because it allows for greater chest expansion and easier breathing by reducing pressure on the lungs and promoting oxygenation. IVFRL/DNS@ 80 ML Hr, Inj:1.5% ceftriaxone & salbactum, ceftriaxone Inj given to killed bacteria Inj:750 mg levoflox, inj levoflox is given because of Levofloxacin is FDA-approved for the treatment of nosocomial pneumonia, community-acquired pneumonia, acute bacterial rhinosinusitis, acute bacterial exacerbation of chronic bronchitis, acute bacterial prostatitis, acute pyelonephritis, urinary tract infection, skin or skin structure infections, prophylaxis,Inj:40 mg pan, inj pan for to relieve acidity Inj:40 mg IV emset, Inj emset given for to control nausea and vometting Inj:100 ml octeroid. Octreotide injection is used to treat severe diarrhea and other symptoms that occur with certain intestinal tumors (eg, vasoactive intestinal peptide tumors or VIPomas) or metastatic carcinoid tumors (tumors that has already spread in the body). IV, Inj. Multivitamins in DNS,inj multivitamine given because of M.V.I.-Adult (multi-vitamin injection) is a combination of vitamins indicated for the prevention of vitamin deficiency in adults and children aged 11 and older receiving parenteral nutrition. Inj. Neomol 500 ml. Inj neomol is given to relieve fever after all medical treatment patient general condition is not improved surgeon Surgery performed on date 19/12/2023 Exploratory laparotomy with distal pancreactomy with splenectomy .and prescribed following treatment and interventions elevated posture ,IV. Fenta 5 Ampl, 40, RL 5%D, IV., Linezolide: 600 mg, IV. Vanco 14 ml, IV., pan 40 mg, IV, pause 40 mg, IV.Inj. Vit C, Inj. Octreotide 100 mg, Inj, Hydrocort 50 mg, I/O charting 1 hourly, Four-hourly charting of the left abdominal dressing, pancreactomy and splenectomy combined with an exploratory laparotomy this surgery done by under aseptic technique with specialized hand surgeon Under local anesthesia (2% Xylocaine + Adrenaline), the patient is placed in a supine posture, the

surgeon performs the procedure, and medicine is provided. Following surgery Luminosity, elevated posture, IV. Fenta 5 Ampl, 40, RL 5%D, IV., Linezolide: 600 mg, IV. Vanco 14 ml, IV. Pan 40 mg, IV, pause 40 mg, IV.Inj. Vit C, Inj. Octreotide 100 mg, Inj, Hydrocort 50 mg, I/O charting 1 hourly,Four-hourly charting of the left abdominal dressing, After getting all the care they require, the patient is stable. The patient had clinical improvement after surgery, and he was also placed in a rehabilitation program for psychological support and prosthesis fitting. He showed considerable adaption to mobility assistance during follow-up visits, and his health remained stable with no recurring serious infections. After all case study done conclusion is getting Road Traffic Accidents (RTAs) leading to splenic injury, a multidisciplinary approach, focusing on hemodynamic stability and injury grade, is crucial for effective management, with non-operative management being favoured for stable patients, and splenectomy reserved for unstable or severe cases.

Clinical Findings:

The patient having RTA with splenic injury, according to the results of the physical examination. Hypovolemic Shock, Tachycardia, Pale Skin, Light headiness or Dizziness, Abdominal Distension, Bruising, Nausea, And Vomiting, Rigid Abdomen Developed .severe sign and symptoms produced due to road traffic accident resulting in Multiple Traumatic Injuries, Including a Splenic Injury, Head Injury, Subdural Hematoma (SDH), Hemothorax, Hemoperitoneum, Left-Hand Fracture, Chest Compression, and Pelvic Compression. Upon Admission, The Patient Presented With Stable Vital Signs But Showe Signs Of Internal Bleeding, Abdominal Collection, And Left Upper Quadrant Pain. Blunt Trauma and Splenic Injury Produce.

Figure: The illustration shows a patient with Rta with splenic injury Hypovolemic Shock, Tachycardia, Pale Skin, Lightheadness Or Dizziness, Abdominal Distension, Bruising, Nausea ,And Vometting ,Rigid Abdomen Developed.severe sign and symptoms produced due to road traffic accident Resulting In Multiple Traumatic Injuries, Including A Splenic Injury, Head Injury, Subdural Hematoma (SDH), Hemothorax, Hemoperitoneum, Left-Hand Fracture, Chest Compression, And Pelvic Compression. Upon Admission, The Patient Presented With Stable Vital Signs But Showe Signs Of Internal Bleeding, Abdominal Collection, And Left Upper Quadrant Pain. Blunt Trauma and Splenic Injury Produce.

Timeline : 1st image after clinical findings sign & symptoms show,2nd image in diagnostic assessment, chest x-ray& ct scan result ,3rd image in follow up and outcome show Exploratory laparotomy with distal pancreactomy with splenectomy.

Diagnostic Assessment:

Some laboratory investigations are done reports findings are CT scan (Abdomen), CBC count, Culture report, Ercp, Histopathology, and Antibiotis sensitivity report completed on

1] Ultrasound-guided USG reproduction can aid in the diagnosis of diseases affecting multiple body parts, including the heart. & the heart valves. Vascular structures .abdominal organs, such as the spleen, liver, gallbladder, or pancreas

1] USG impression:-gas build-up in the belly, fluid in the abdomen and pelvis, fluid collection at the suture site in the subcutaneous plane of the upper abdomen, and the presence of plural effusion in the patient.

2] **Antibiotic sensitivity reports** are completed because they aid in determining which antibiotics will work best to treat infections.

2] Impression:-Elite genta withstand-resistant Vancomycine: sensitive; linezolide: intermediate

Refractory to ampicillin, resistant to penicillin. The purpose of the culture report was to determine whether the patient had a bacterial infection. Growth of Enterococcus caecum is the impression

3] Histopathology is used to identify and evaluate a variety of issues, including cancer.

3] Histopathology impression: Histopathology reveals ischemia necrosis with inflammatory cells and fibrous fatty tissue in the hemorrhagic portion of the pancreas, but otherwise the tissue is unremarkable. A section of a normal-looking area with histology reveals fibrofatty tissue; otherwise, it is ordinary.

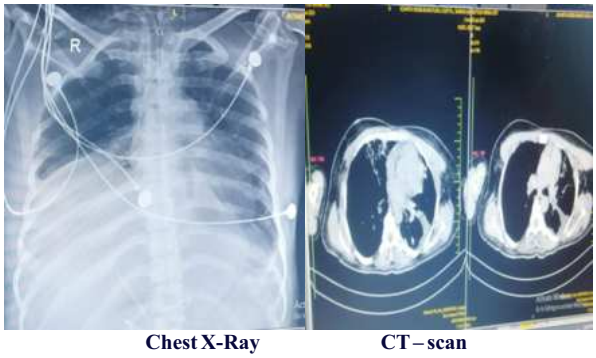
4]CT Abdomen: The abdomen and its organs can be scanned with a computed tomography (CT) scan to check for tumours and other lesions, traumas, intra-abdominal haemorrhage, infections, unexplained abdominal pain, blockages, or other disorders.

4] CT Abdomen Impression: The posterior wall of the stomach is where gastric perforation occurs. Accumulation of free fluid in the pelvis and abdomen.

5] ERCP Impression: Liver cancer, pancreatitis, obstruction or stones in the liver, or unexplained stomach pain are among the conditions for which an ERCP is performed. Conclusion: a persistent perforation of the stomach mucosa was found.

6] CBC Count, Impression: A complete blood count, or CBC count, can be used to determine the source of symptoms, including weakness, exhaustion, and fever, as well as the cause of swelling, pain, bruises, bleeding, or changes in the count of blood cells.

7] ABG Analysis Impression: ABG analysis was performed. -Hb:14.3%, MCHC:33.3, HCT:42.8, Granulocyte:-80, Lymphocyte:-:-15RDW:16.5, Eosinophils: 00 ECG A physician diagnosed RTA with splenic damage following a comprehensive diagnostic assessment. Exploratory distal pancreatectomy and splenectomy performed during laparotomy.



Chest X-Ray **CT – scan**

CT – scan Abdomen Impression:-Gastric perforation is a posterior well of the body of the stomach. Fluid collection in the abdomen & pelvis.

Therapeutic Interventions: sedation, sedation is given because of Sedation is given to patients to help them feel relaxed, comfortable, and sometimes even sleepy during medical or dental procedures, reducing pain, anxiety, and potentially unpleasant memorie. Ventilation support, ventilatory support given because of Ventilator support, or mechanical ventilation, is given to individuals who cannot breathe adequately on their own due to conditions like respiratory failure, severe illness, or during surgery, allowing the machine to take over the breathing process and support oxygen delivery. and a propped-up propped up position given because of Propping oneself up or adopting an upright posture (like the orthopneic position) helps with dyspnea (shortness of breath) because it allows for greater chest expansion and easier breathing by reducing pressure on the lungs and promoting oxygenation. IVFRL/DNS@ 80 ML Hr, Inj:1.5% ceftriaxone & salbactum, ceftriaxone inj given to killed bacteria Inj:750 mg levoflox, inj levoflox is given because of Levofloxacin is FDA-approved for the treatment of nosocomial pneumonia, community-acquired pneumonia, acute bacterial rhinosinusitis, acute bacterial exacerbation of chronic bronchitis, acute bacterial prostatitis, acute pyelonephritis, urinary tract infection, skin or skin structure infections, prophylaxis,Inj:40 mg pan, inj pan for to relieve acidity Inj:40 mg IV emset,inj emset given for to control nausea and vometting Inj:100 ml octeroid. Octreotide injection is used to treat severe diarrhea and other symptoms that occur with certain intestinal tumors (eg, vasoactive intestinal peptide tumors or VIP omas) or metastatic

carcinoid tumors (tumors that has already spread in the body). IV, Inj. Multivitamins in DNS,inj multivitamine given because of M.V.I.-Adult (multi-vitamin injection) is a combination of vitamins indicated for the prevention of vitamin deficiency in adults and children aged 11 and older receiving parenteral nutrition.Inj. Neomol 500 ml.inj neomol is given to relieve fever after all medical treatment patient general condition is not improved surgeon Surgery performed on date 19/12/2023 Exploratory laparotomy with distal pancreactomy with splenectomy.

Follow up and outcome: **After** Exploratory laparotomy with distal pancreactomy with splenectomy .surgery surgeon provide following interventions to improve health conditions this is elevated posture, IV. Fenta 5 Ampl, 40, RL 5%D, IV. Linezolide: 600 mg, IV. Vanco 14 ml, IV. Pan 40 mg, IV, pause 40 mg, IV.Inj. Vit C, Inj. Octreotide 100 mg, Inj, Hydrocort 50 mg, I/O charting 1 hourly, Four-hourly charting of the left abdominal dressing, pancreactomy and splenectomy combined with an exploratory laparotomy this surgery done by under aseptic technique with specialized hand surgeon Under local anesthesia (2% Xylocaine + Adrenaline), the patient is placed in a supine posture, the surgeon performs the procedure, and medicine is provided. Following surgery Luminosity, elevated posture, IV. Fenta 5 Ampl, 40, RL 5%D, IV. Linezolide: 600 mg, IV. Vance 14 ml, IV. Pan 40 mg, IV, pause 40 mg, IV.Inj. Vit C, Inj. Octreotide 100 mg, Inj, Hydrocort 50 mg, I/O charting 1 hourly, Four-hourly charting of the left abdominal dressing,

Postoperative Image: Surgery performed on date 19/12/2023 Exploratory laparotomy with distal pancreactomy with splenectomy.

DISCUSSION:

Spleen injuries are among the most frequent trauma-related injuries. At present, they are classified according to the anatomy of the injury. The optimal treatment strategy, however, should keep into consideration the hemodynamic status, the anatomic derangement, and the associated injuries .after provide specific care in RTA with splenic injury patient is cure easily this is antibiotic supply in the event of any sudden onset of unexplained fever, malaise, chills, or other constitutional symptoms, especially when medical review is not readily accessible. The recommended options for emergency standby in adults include the following: (a) Amoxycillin, 3 g starting dose followed by 1 g, every 8 h; (b) Levofloxacin 500 mg every 24 h or Moxifloxacin 400 mg every 24 h (for beta-lactam allergic patients).The recommended emergency standby treatment in children is Amoxycillin 50 mg/Kg in three divided daily doses. For beta-lactam allergic patients, an alternative should be proposed by a specialist (fluoroquinolones are generally contraindicated in children, but due to the possible severity of OPSI, they might still be considered).If the patient is being treated in an outpatient setting, he/she should be referred immediately to the nearest emergency department. Clinical deterioration can be rapid even after antibiotic administration. Antibiotics should be modified once blood culture results become available. Failures of antibiotic prophylaxis have been reported, so patients should be warned that prophylaxis reduces but does not abolish the risk of sepsis. Due to the increased risk of severe malaria, a splenic/hypo splenic travellers to endemic areas should receive an adequate pre-departure counseling, & advice surgery (9)

CONCLUSION:

Road Traffic Accidents (RTAs) leading to splenic injury, the management approach prioritizes hemodynamic stability and non-operative management whenever possible, with surgical intervention (including splenectomy) reserved for unstable patients or those with severe injuries. Patients with suspected splenic injury following an RTA should undergo immediate Initial assessment and resuscitation, focusing on airway, breathing, and circulation (ABC). , provide guiding management hemodynamic stability, provide hemo-dynamically stable patients, non-operative management, including observation, conservative treatment, and potentially splenic artery embolization (SAE), is often the preferred approach. ,provide surgical intervention Surgical Intervention (Splenectomy),diagnostic imaging done Ultrasound or diagnostic peritoneal lavage may be used in hemodynamically unstable patients to assess for intraperitoneal hemorrhage, CT scans are crucial for assessing the extent and grade of splenic injury in hemodynamically stable patients. after that splenic Artery Embolization (SAE) SAE is a valuable tool in non-operative management, helping to control bleeding and preserve the spleen.& take follow up .(10)

Abbreviations

Road Traffic Accidents (RTAs), Airway, Breathing, And Circulation (ABC), Splenic Artery Embolization (SAE), Computed Tomography (CT), Subdural Hematoma (SDH), American Association for the Surgery of Trauma-Organ Injury Scale (AAST-OIS), Low- And Middle-Income Countries (LMICs) , Ubiquitin–Proteasome Pathway (UPP)

Acknowledgement

We would like to express our sincere gratitude to all the researchers whose studies were included in this case report. Their work has significantly contributed to the body of knowledge on case report on RTA with Splenic Injury. Special thanks to our colleagues for their valuable input during the research process, and to our families for their understanding and encouragement throughout this study.

Conflicts Of Interest

The authors declare that there are no conflicts of interest associated with this study. The case report is conducted without any financial support or personal interests influencing the results. All authors have disclosed any potential conflicts of interest, and no such conflicts exist that could affect the content or outcomes of this case report.

Patient Perspective: According to the patient, he had accepted and come to terms with his predicament. He decided to focus on her recovery and observed that his current symptoms had much improved.

Informed Consent: The patient provided written consent for the use of their medical records in this case study. The patient is aware that their personal information and health will remain anonymous and be used exclusively for educational and research reasons. They understand the nature of the publication, its goal, and their right to withdraw consent at any time without it affecting their medical treatment. The patient authorizes the publication of the finished work in this medical journal after reading it.

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