Case of the week answer

1) The provisional diagnosis is traumatic esophageal perforation

Now to understand why? we have to understand the mechanism of injury. The car struck the pedestrian while crossing the road which means the bumper of the car hit the lower extremity for which he underwent open reduction with internal fixation for tibial and fibular fractures. After the bumper hits the lower extremity the pedestrians usually roll over the hood of the car which causes blunt thoracic trauma. This causes rise in intra-esophageal pressure leading to rupture and can also cause associated rib fractures which can lead to pneumothorax. The esophageal rupture maybe missed initially owing to associated injuries that are obvious such as pneumothorax and lower extremity trauma.

The greenish fluid in the chest tube bag actually represents GI contents which have leaked from the esophagus and has resulted in a pleural effusion overtime.

2) to confirm the diagnosis we can do a water soluble esophagogram which shows leakage of contrast from the perforation.

3) The most immediate management is to make the patient NPM and start the patient on broad spectrum IV antibiotics to prevent mediastinitis.

In case of small tears with minimal contamination to the mediastinum non-operative management may be tried. Early operative management usually includes primary repair of the perforation with placement of chest tube for post-operative drainage. A feeding jejunostomy may be done at the same sitting to meet the nutritional needs of the patient. In case where primary repair is not possible resection and diversion procedures are performed.