

**Application & Assessment of Rockall  
Scoring System In Managment of  
Patients With Upper Gastrointestinal  
Bleeding in Prediction of Mortality and Rebleeding**

Thesis submitted for partial fulfillment of Master Degree  
in Critical Care Medicine

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

سُرْمَا  
مَرَا  
كَلِمَاتُهَا

## Abstract

**Introduction:** Acute upper gastrointestinal bleeding is a relatively common, potentially life - threatening medical emergency that necessitate I.C.U admission, scoring system help risk stratification, and prediction of mortality and re-bleeding in those patient.

**Aim Of The Study:** The study done to apply and asses validity of Rackall scoring system in prediction of mortality and re-bleeding in patient with acute UGIB.

**Patient And Methods:** the study was done on 20 patient presented with acute UGIB during period of 6 months (from August 2009 to February 2010) in multicenter hospitals, Rockall scoring system applied to all patient presented with acute UGIB to asses its validity as a predictor of mortality and re-bleeding in Egyptian population, all patient had upper endoscopy within 24 hrs of admission , every patient had the score collectively measured prior to to endoscopy from 7 and then after doing endoscopy from 11, main outcome measure is to asses its ability to predict mortality and re-bleeding in Egyptian population .

**Results:** Rockall scoring can reliably predict mortality, the scoring system cannot significantly predict re-bleedding in patient with acute UGIB.

**Conclusion:** Rockall scoring system can significantly predict mortality but cannot significantly predict re-bleeding in patient with acute UGIB.

**Key Words:**

UGIB: upper gastrointestinal bleeding.

I.C.U: intensive care units .-

## ACKNOWLEDGEMENT

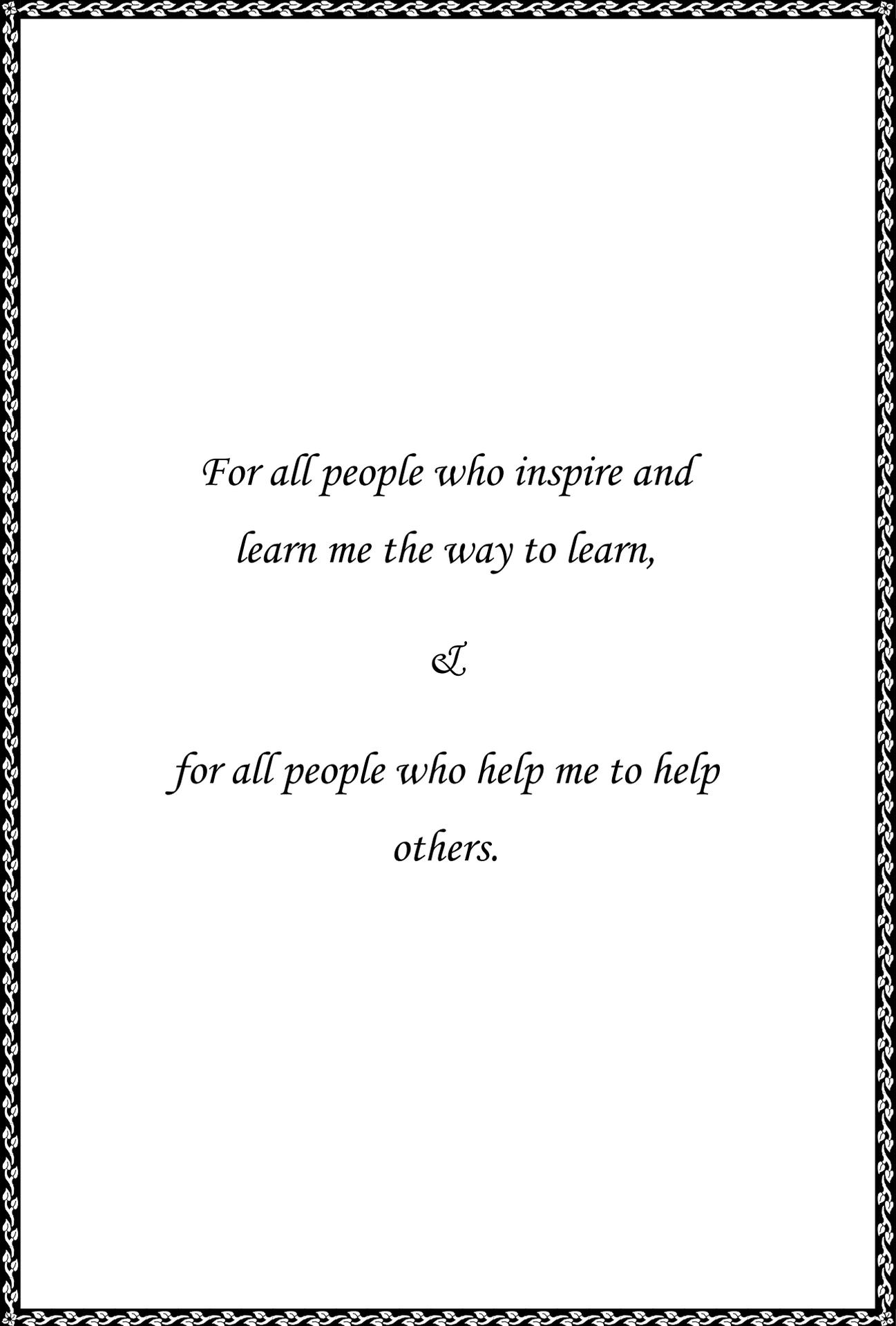
*First and foremost, thanks to **ALLAH**, the most beneficent and most merciful*

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*For all people who inspire and  
learn me the way to learn,*

*&*

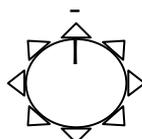
*for all people who help me to help  
others.*

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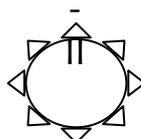
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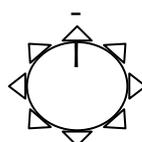


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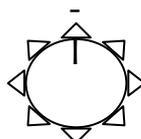
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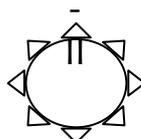


# *List of Abbreviations*

<b>UGIB</b>	: upper gastrointestinal bleeding.
<b>Mg</b>	: milligram
<b>Mcg</b>	: microgram
<b>Mmhg</b>	: millimetermercury
<b>HPVG</b>	: hepatic venous pressure gradient
<b>H.pylori</b>	: Helicobacter pylori
<b>NSAID</b>	: non-steroidal-antiinflammatory drugs
<b>P</b>	: pressure
<b>R</b>	: resistance
<b>WHVP</b>	: Wdeged hepatic venous pressure
<b>FHVP</b>	: free hepatic venous pressure
<b>R</b>	: radius
<b>Hb</b>	: hemoglobin
<b>PPI</b>	: proton pump inhibitor
<b>H</b>	: hydrogen ion
<b>K</b>	: potassium ion
<b>IV</b>	: intravenous
<b>h</b>	: hour
<b>NPO</b>	: nothing per oral
<b>d</b>	: days
<b>CAD</b>	: coronary artery disease



<b>v</b>	: versus
<b>B-blockers</b>	: Beta blockers
<b>EVL</b>	: endoscopic variceal ligation
<b>U.S</b>	: united states
<b>rFVIIa</b>	: recombinant activated factor seven
<b>EGD</b>	: esophagogastroduodenoscopy.
<b>&gt;</b>	: greater than.
<b>ADH</b>	: antidiuretic hormon
<b>UNIT</b>	: unit
<b>NS</b>	: normal saline.
<b>D5W</b>	: dextrose in water.
<b>P.O</b>	: per oral.
<b>B.I.D</b>	: twice daily.
<b>TD</b>	: transdermal.
<b>IGV</b>	: Isolated gastric varices.
<b>n</b>	: number
<b>&lt;</b>	: less than.





# *Introduction*

# Introduction

**A**cute upper gastrointestinal bleeding is divided into two main categories<sup>1</sup>.

1. Variceal upper gastrointestinal bleeding.
2. Non-variceal upper gastrointestinal bleeding.

By definition acute upper gastrointestinal bleeding is defined as: bleeding proximal to ligament of treitz in practice from stomach, esophagus, duodenum<sup>2</sup>.

The **ligament of Treitz** or **suspensory muscle of the duodenum** (**musculus suspensorius duodeni**) is actually a non-striated muscle attached to the diaphragm near the oesophageal opening by the connective tissue around the coeliac artery and left crus of the diaphragm, which descends to be inserted in the distal duodenum (53%) and the duodeno-jejunal flexure (40%)<sup>3</sup>.

It is composed of a fibromuscular band of smooth muscle from the third and fourth parts of the duodenum. An adjacent slip of skeletal muscle from the diaphragm (hilfsmuskel) is distinct anatomically but often associated for convenience. Contraction widens the angle of flexure,

facilitating movement of the intestinal contents. It is a useful landmark for recognising the beginning of the jejunum<sup>3</sup>.

It can not be seen on CT imaging due to its thinness. Its pull on the coeliac ganglia and stems of the coeliac and superior mesenteric arteries is counteracted by the hilfsmuskel<sup>4</sup>.

Over the last few decades, the diagnosis and management of acute gastrointestinal hemorrhage has undergone remarkable changes, particularly with the rapid dissemination and advancement in therapeutic endoscopy and pharmacotherapeutics<sup>5</sup>.

Acute upper gastrointestinal bleeding is a common and potentially life threatening emergency in clinical practice, Thus if we can predict the outcome of a bleeding episode with reasonable accuracy, it would affect patient management and outcome<sup>6</sup>.

In recent years several practice guidelines and risk scores ,combining clinical and endoscopic parameters, have been developed with the aim of assisting physician in the early stages of decision making<sup>7</sup>.

All patient with acute upper gastrointestinal bleeding should have upper endoscopy within 12-24 hours of admission<sup>2</sup>.



*Aim of The Work*