

**Evaluation of diagnostic value of serum levels of D-dimer,
Lactate, Amylase and Base deficit in early diagnosis of acute
mesenteric ischemia.**

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Abstract:

Introduction:

Acute Mesenteric Ischemia (AMI) is a potential deadly disease and is emergency of surgery with high rate morbidity and mortality, often correlated to a diagnostic delay. However various studies performed in this field but likewise there is not specific laboratory and clinical findings that help to diagnosis. so study that help to diagnosis of this disease is necessary and useful. The aims of this study were to Evaluation of diagnostic value of serum levels of D-dimer, Lactate, Amylase and Base deficit in early diagnosis of acute mesenteric ischemia.

Methods:

In a prospective, non-interventional study that was conducted in Emergency Department of Tabriz University of Medical Science, on 70 patients with probable diagnosis of AMI. Blood samples were taken from patients and moreover routine laboratory analyzed for D-Dimer, lactate, amylase and bicarbonate (HCO₃). Finally the results of lab markers were compared with AMI diagnosis confirmed by CT-Scan with contrast.

Results:

70 patients with suspected AMI were studied. 39 patients (55.7%) were male and 31 patients (44.3%) were female. The average age was 68.01 ± 14.67 (\pm SD). Based on CT-Scan with contrast results 27 (38.6%) patients had AMI and 43 (61.4%) patients had not AMI. There was no difference in serum D-dimer, Amylase, bicarbonate levels between patients with AMI and non- AMI patients. But serum lactate levels in patients with AMI (Mean Rank: 43.93) were significantly higher than patients without AMI (Mean Rank: 30.21). (P=0.006)

Conclusion:

Detection of serum D-dimer, Amylase, Hco₃ could not help to differentiate patient with AMI from those with non-AMI. However serum lactate may help to diagnose acute mesenteric ischemia. this study showed diagnosis of AMI is clinical.

Key Words:

Acute Mesenteric Ischemia, D-Dimer, Lactate, Amylase, Base Deficit.