

# بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



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تحفظ هذه الأقراص المدمجة يعيدا عن الغيار







بالرسالة صفحات لم ترد بالأصل









# DLE OF DUPLEX-DOPPLER SONOGRAPHY IN RENAL HAEMODYNAMIC CHANGES IN LIVER DISEASES

Thesis
Submitted for partial fulfillment of M.Sc. Degree
In TROPICAL MEDICINE

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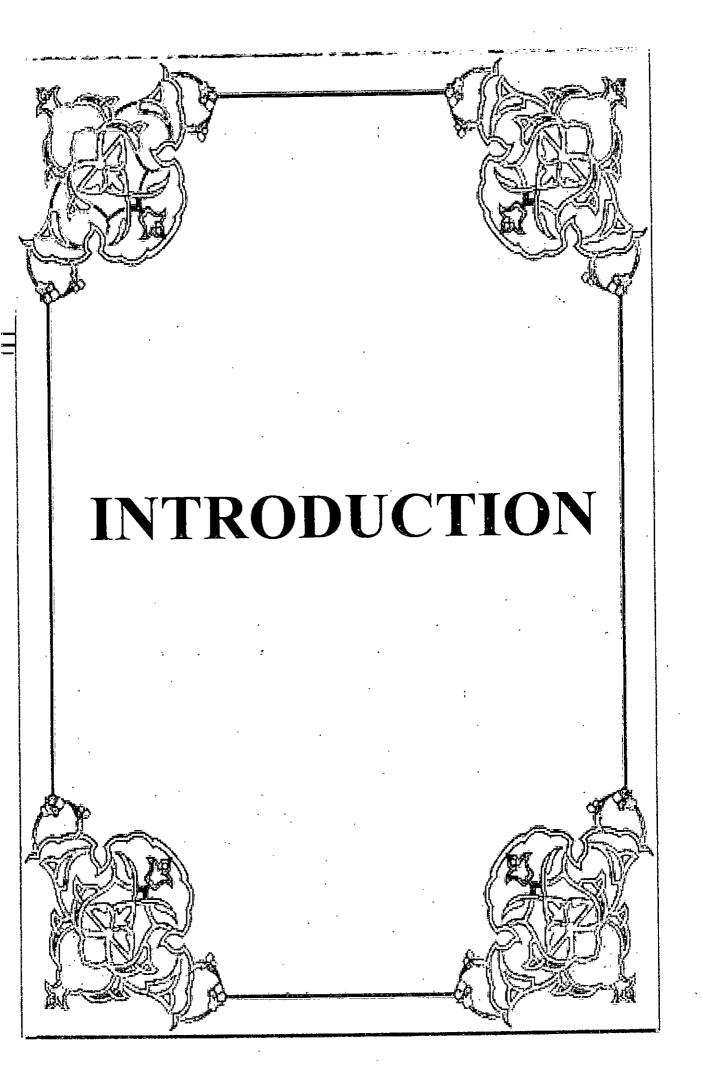
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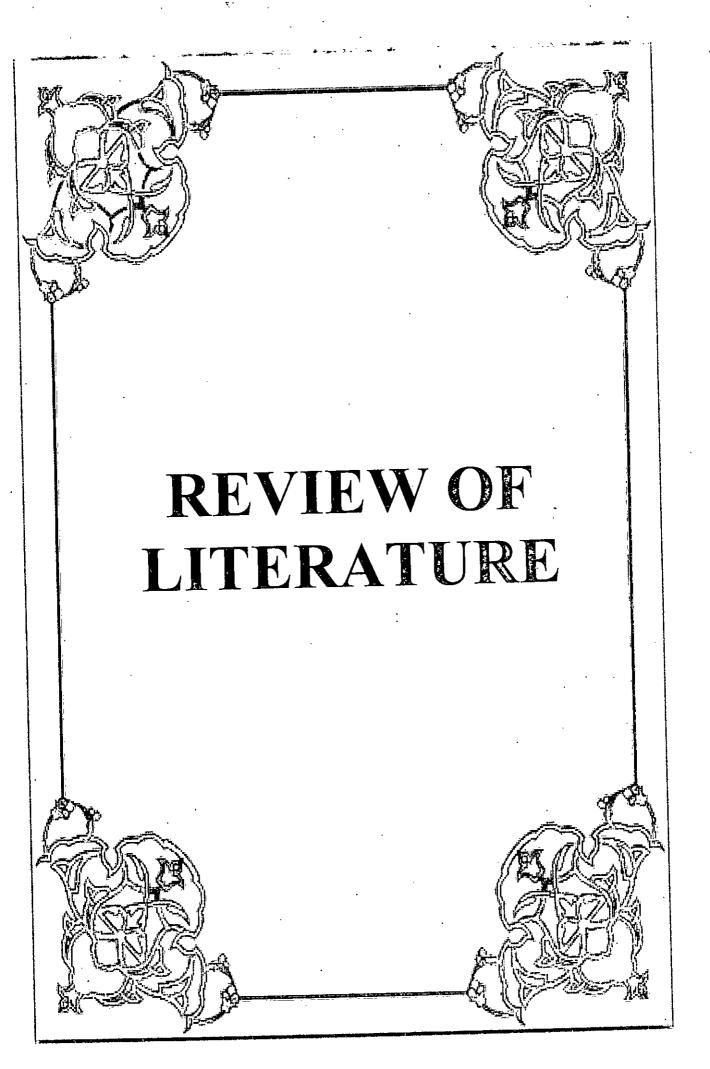
#### ACKNOWLEDGMENTS

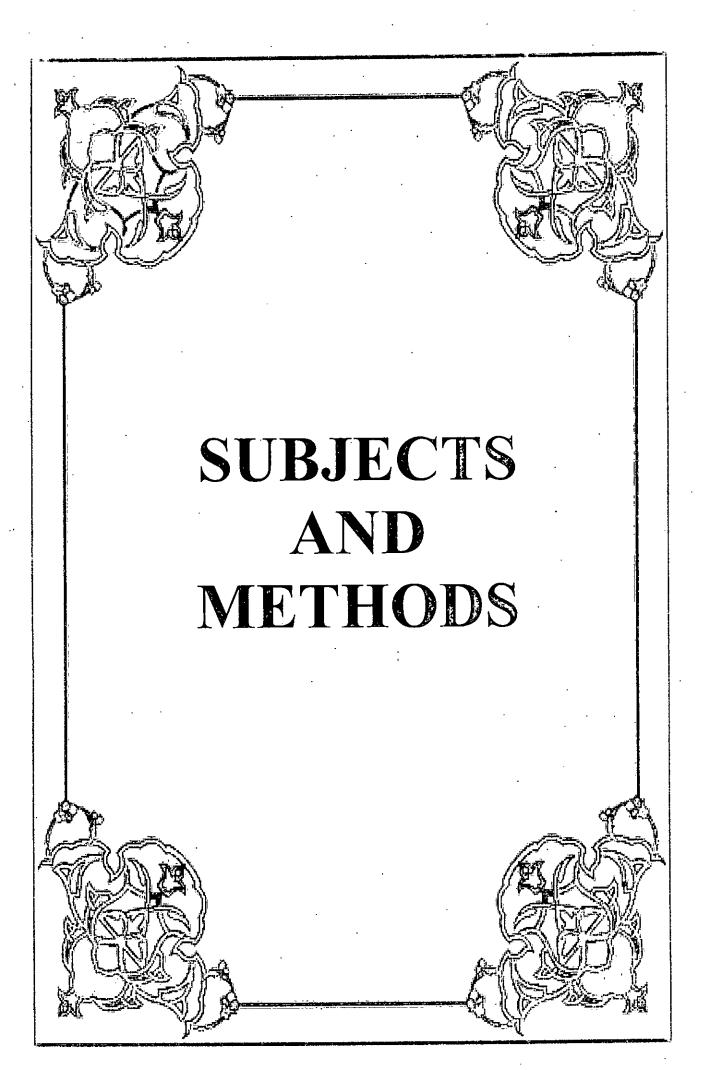
Before all, I should express my deep thanks to GOD, without his great blessings I would never accomplish my work.

I am deeply obliged to **Prof. Dr. Salah Ibrahi**m **Saif El-Din,** Professor of Tropical Medicine, Faculty of Medicine, Ain Shams University, without his vast experience, knowledge, and continuous meticulous guidance, this work would not have been possible. I stand in great debt for all what he did.

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#### INTRODUCTION

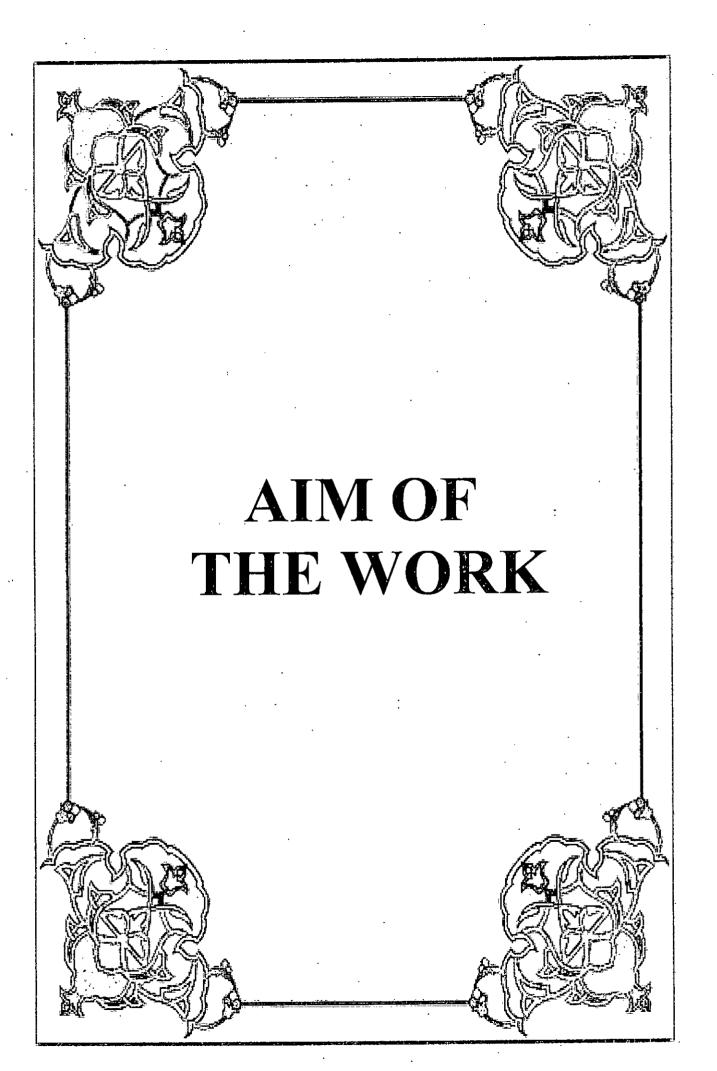
Renal disorders complicating liver disease are frequent findings due to either extrahepatic causes like intoxication and circulatory dysfunction, diseases that simultaneously affect both the liver and kidney like multisystemic or viral diseases or other clinical entities in which the manifestations of renal disease are consequences of hepatic disorders as in liver circhosis or in fulminant hepatitis (Schmidt, 1983).

Hepatorenal syndrome is a severe form of kidney dysfunction and commonly developed in patients with established liver disease. It is defined as unexplained kidney failure in patients with liver disease which does not have clinical, laboratory, or anatomic evidence of other known causes of kidney failure (Platt et al., 1994). The progressive renal dysfunction is generally considered to be functional in nature due to absence of consistent pathologic changes. The kidney failure can be corrected after liver transplantation, not only this but also the kidney in patients with the hepatorenal syndrome can be successfully transplanted into patient with normal livers (koppel et al., 1996).

Renal haemodynamic changes begins early in the course of liver disease (Papadakis and Arieff, 1987). The hallmark change is intense intra-renal vasoconstriction (Gentilini et al., 1980).

In hepatorenal syndrome, renal arterial vasoconstriction occurs causing reduced renal blood flow with manked decrease in renal perfusion leading to functional renal failure (Wilkinson et al., 1990).

Duplex ultrasonography has been demonstrated to be an accurate and reliable technique in liver diseases and in detection of early kidney dysfunction (Maroto et al., 1994 and Colli et al., 1993). An elevated resistive index has been observed in various conditions associated with elevated vascular resistance, therefore, duplex-Doppler ultrasonography may also be of value in the diagnosis of functional kidney failure in cirrhosis which is due to renal arteriolar vasoconstriction (Platt et al., 1989).



### AIM OF THE WORK

The aim of this work is to assess the value of duplex Doppler ultrasonography:

- 1- In detecting liver disease related kidney dysfunction.
- 2- Also to predict renal dysfunction in some cases of chronic liver diseases.