

***ROLE OF US ELASTOGRAPHY  
AS  
A NON-INVASIVE TECHNIQUE  
IN ASSESSMENT OF  
LIVER PATHOLOGIES***

*ESSAY  
SUBMITTED FOR PARTIAL FULFILLMENT OF MASTER DEGREE IN  
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# دور قياس المرونة عن طريق الموجات فوق الصوتية كتقنية غير تداخلية فى تقييم أمراض الكبد

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### **Abbreviations**

|                               |                                                        |
|-------------------------------|--------------------------------------------------------|
| <b>ALT</b>                    | Alanine transpeptidase                                 |
| <b>APRI</b>                   | Aspartate amino transferase (AST)-platelet ratio index |
| <b>APOA1</b>                  | Human apolipoprotein A1                                |
| <b>AST</b>                    | Aspartate aminotransferase                             |
| <b>CBD</b>                    | Common Bile Duct                                       |
| <b>CHD</b>                    | Common Hepatic Duct                                    |
| <b>CTLA</b>                   | Cytotoxic T. Lymphocyte antigen                        |
| <b>ECM</b>                    | Extra cellular matrix protein                          |
| <b>HA</b>                     | Hepatic Artery                                         |
| <b><math>\gamma</math> GT</b> | $\gamma$ -glutamyl transpeptidase                      |
| <b>HA</b>                     | hyaluronic acid                                        |
| <b>HCV</b>                    | Hepatitis C Virus                                      |
| <b>HVs</b>                    | Hepatic veins                                          |
| <b>IVC</b>                    | Inferior Vena Cava                                     |
| <b>KPa</b>                    | Kilo- Pascal                                           |

|                                 |                                                |
|---------------------------------|------------------------------------------------|
| <b>LN<sub>s</sub></b>           | Lymph nodes                                    |
| <b>LB</b>                       | Liver biopsy                                   |
| <b>MMPS</b>                     | Matrix metalloproteinases                      |
| <b>MHz</b>                      | Mega Hertz                                     |
| <b>m RNA</b>                    | Messenger RNA                                  |
| <b>NAFLD</b>                    | Non alcoholic fatty liver disease              |
| <b>NASH</b>                     | Non Alcoholic steato-hepatitis.                |
| <b>PBC</b>                      | Primary biliary cirrhosis.                     |
| <b>PDGF</b>                     | Platelet-derived growth factor.                |
| <b>PT</b>                       | Prothrombin time                               |
| <b>PPAR <math>\gamma</math></b> | Peroxisome proliferator –activated receptor    |
| <b>PV</b>                       | Portal vein.                                   |
| <b>ROI</b>                      | Region Of Interest                             |
| <b>ROS</b>                      | Reactive oxygen species                        |
| <b>TGF <math>\beta</math></b>   | Transforming growth factor beta                |
| <b>Th2</b>                      | T helper cell 2                                |
| <b>TIMP1</b>                    | Tissue inhibitors of metalloproteinases Type 1 |
| <b>RTE</b>                      | Real time Elastography                         |

|              |                                                        |
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| <b>HA</b>    | Hepatic Artery                                         |



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