ANALYSIS OF ANTINUCLEAR ANTIBODY TITERS AND PATTERNS USING HEP 2 INDIRECT IMMUNOFLUORESCENCE IN VARIOUS LIVER DISEASES
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Background: Abnormal liver function can be seen in not only hepatitis B virus infection (HBV), hepatitis C virus infection (HCV), hepatic carcinoma (HCC), but also in primary biliary cirrhosis (PBC), autoimmune hepatitis (AIH), and systemic autoimmune rheumatic diseases (SARD). Antinuclear antibody (ANA) testing using indirect immunofluorescence assay (IIFA) is a common and economical method which contributes to detect SARD and autoimmune liver diseases [1].

Objectives: Our objective was to investigate ANA positivity, titers and their patterns in multiple liver diseases, including PBC, AIH, HBV, HCV, and HCC, compared to healthy controls (HC).

Methods: 2537 patients with SARD, 137 PBC cases, 57 AIH cases, 3420 HBV cases, 769 HCV cases, 268 HCC cases, and 1073 HC were retrospectively assessed. The titters and patterns of ANA were detected by the IIFA method.

Results: ANA positivity rate was considerably discernible between these diseases, which is 90.1% in SARD, 93.4% in PBC. 49.1% in AIH, 19.1% in HBV, 13.9% in HCV and 23.5% in HCC. Moreover, only 4.9% of HCC cases, 2.5% of HBV patients and 1.6% of HCV patients had an ANA titer ≥ 1:320. The mixed pattern which composed of at least two patterns majorly lied in PBC, AC-15 and AC-21 was frequently related to liver diseases; the former pattern was more frequently found in AIH (84.2%) and PBC (8.8%), and the latter pattern was easily seen in PBC (62.2%) and HCC (22.6%). The positive rate of ANA in HC was 12.2% and its major pattern was AC-2.

Conclusion: There are differences in ANA positivity among patients with SARD and various liver diseases. Some mixed patterns may provide important evidence for the diagnosis of PBC. Clinicians should pay attention to ANA patterns and titer during the interpretation of this test.


Figure 1. The Proportion of Each ANA Pattern Exhibited in Different Diseases and HCANA: antinuclear antibodies; HC: healthy controls; PBC: primary biliary cirrhosis; AIH: autoimmune hepatitis; SARD: systemic autoimmune rheumatic diseases; HBV: hepatitis B virus infection; HCV: hepatitis C virus infection; HCC: hepatic carcinoma.

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DO TENDER JOINTS IN PSORIATIC ARTHRITIS REFLECT INFLAMMATION ON ULTRASOUND?
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Background: Ultrasound (US) is a sensitive method for evaluating inflammation in arthritis, but several studies have shown discrepancies in inflammatory findings on US examination and clinically assessed disease activity, both in rheumatoid arthritis (RA) and psoriatic arthritis (PsA) (1, 2). In RA, a recent study found that swollen but not tender joints reflect synovitis detected by US (3). In PsA tenderness without joint swelling is a frequent finding.

Objectives: To investigate the agreement of clinical joint evaluation (swollen joints (SJ) and tender joints (TJ) and US findings of inflammation in PsA assessing joints and periaricular tissue involvement (e.g. joint capsule, adjacent ligaments etc.).

Methods: We included 42 patients with active PsA (min. 3 swollen and tender joints) and hand involvement (min. 1 finger joint and/ or 1 finger with dactylitis). All patients had US examination performed by one examiner (blinded to clinical data) using a high-end US scanner with a high-frequency 14 MHz linear transducer, 2.5th metacarpophalangeal- (MCP), proximal and distal interphalangeal (PIP and DIP) joints were additionally scored for volar synovitis (0-3) and presence of periaricular PD activity (PD activity in the joint capsule and/or adjacent structures). SJ (76) and TJ (78) counts were performed by an experienced rheumatologist blinded to US findings. As prevalence of lesions was low, agreement between TJ, SJ and US was calculated using the prevalence and bias adjusted Kappa

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