Steatosis in chronic hepatitis B and its impact on the therapeutic response to entecavir

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BACKGROUND:

- **Steatosis** has been clearly reported during **alcohol intake**, **excess weight** and **viral hepatitis C**.
- This has not been sufficiently studied in **chronic hepatitis B (CHB)**.
- We aimed to determine the **prevalence of steatosis** during CHB treated with entecavir (ETV) and its impact on **virological response**.

PATIENTS AND METHODS:

- A **retrospective** descriptive study.
- Including **CHB patients treated with ETV**.
- Hospitalized in an infectious diseases department
- Between 2009 and 2019.
- The population was divided into:
  - **G1** (with steatosis).
  - **G2** (without steatosis).

RESULTS:

- In total, **233 patients** were collected.
- **The mean age** was 38 ± 10 years.
- **Sex ratio** (M/F)=2.6
- **The prevalence of steatosis** (Figure 1)

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Figure 1: The prevalence of steatosis
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- **Clinically**:
  - G1 patients were older (38 vs 35 years, p = 0.03).
  - The presence of steatosis was **not associated** with:
    - Gender (p=0.2)
    - Diabetes (p=0.2)
    - Alcohol consumption (p = 0.3).

- **Biologically**:
  - **Thrombocytopenia**: more observed in G1 (20% vs 6%, p = 0.03).
  - **Cytolysis**: found in both groups (p=0.4).
  - Cytolysis was greater than 3 times the upper limit of normal in 32.5% of cases.

- **The virologic response to ETV**:
  - **Complete** in both groups regardless of the presence of steatosis or not. In fact, its rate reached 79% in G1 and 80% in G2 (p = 0.6).

CONCLUSION:

- Despite the young age of the patients and the absence of diabetes, steatosis was common.
- The role of hepatitis B may be suggested.
- Steatosis do not influence the progression of fibrosis or the response to therapy.