Reversible liver damage induced by Paroxetine in a patient with major depressive disorder

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Objectives

To discuss the risk of liver damage in patients treated with paroxetine.

Background and aims

Drug-induced liver injury (DILI) is a rare adverse effect of paroxetine, a selective serotonin reuptake inhibitor (SSRI). The authors report an illustrative clinical case and present a brief review of the relevant literature.

Materials and methods

“Pubmed” database was searched using the terms “paroxetine” and “hepatotoxicity”. Relevant data from the patient’s medical record was collected.

Results

♂, 79 years old,
Major Depressive Disorder

Treated with:

- **Paroxetine 40mg/day** (started 7 months before)
- Quetiapine SR 50mg/day, mirtazapine 30mg/day and alprazolam 0.5mg/day (recently started)

Nausea

+

Vomiting

+

Abdominal discomfort

Laboratory tests:

GGT - 396IU/L

ALT, AST - 198IU/L, 86IU/L

Total bilirubin - 1.6mg/dL

Alkaline phosphatase - 401IU/L

Viral hepatitis serological tests - negative

Imagiology tests:

Liver ultrasound

Endoscopic retrograde cholangio-pancreatography

NORMAL

Mirtazapine, quetiapine, alprazolam → **STOPPED**

Cholestatic pattern → **UNCHANGED**

Paroxetine → STOPPED

Switch to Sertraline

Patient's condition → IMPROVED

Liver function tests - NORMAL

Discussion and key notes

Paroxetine had the largest number of cases of DILI within the SSRI class

Liver damage is in most cases **idiosyncratic, unpredictable** and **unrelated to drug dosage**.

PROMPT RECOGNITION of liver injury and **EARLY WITHDRAWAL** are **ESSENTIAL**