



Fulminant liver failure and renal failure related with malva sylvestris

To the Editor,

Malva sylvestris (MS) is a kind of plant that grows naturally in fields, hedgerows, and fallow fields. The plant is commonly used in cooking in the Central Anatolia region of Turkey. Despite its extensive usage, only one case of an adverse effect of MS has been reported in the English medical literature until today (1). Here, we present a new case with fulminant hepatic failure and renal failure that were caused by MS and resulted in death.

A 36-year-old woman in a coma was admitted to our institute. According to her relatives' explanations, she denied nausea and headache that occurred 2 hours after she had eaten MS at dinner on the day before admission. The next day, she developed lethargy, and her parents brought her to the hospital. Her past medical history and family history were unremarkable. The patient was not using any regular drug for any reason, and she was not an alcohol consumer. On physical examination, she was in a coma state with an acidotic breathing pattern. Laboratory findings at admission were as follows: aspartate aminotransferase 1750 IU/mL (normal <40 IU/mL), alanine aminotransferase 2200 IU/mL (normal <40 IU/mL), alkaline phosphatase 400 IU/mL (normal <240 IU/mL), gamma-glutamyl transpeptidase 75 IU/mL (normal <38 IU/mL), albumin 2.9 gr/dL, total bilirubin 4.2 mg/dL, and direct bilirubin 2.8 mg/dL. Prothrombin time was extended to 18 seconds. Serological markers for acute viral hepatitis were negative for anti-HAV IgM, HbsAg, anti-HBc IgM, anti-HCV, and HIV, cytomegalovirus, Epstein-Barr virus, and herpes simplex viruses. Urea: 110 mg/dL, creatinine 4.8 mg/dL, sodium 142 mmol/L (normal: 139-150 mmol/L), and potassium 6.6 mmol/L (normal: 3-5 mmol/L). The obtained arterial blood showed pH: 7.02, pO₂: 65 mm Hg, pCO₂: 23 mm Hg, and HCO₃: 6 mmol/L. Abdominal ultrasound revealed normal liver echotexture, with minimal free fluid surrounding the liver and the spleen. Markers for autoimmune hepatitis were also negative. Supportive treatment was commenced with antibiotics, lactulose, and hemodialysis; urine output, stool frequency, liver

size, and state of consciousness were monitored. Control laboratory findings revealed rapid deterioration of liver functions, and she was transported to a transplantation center. However, she died during the preparation phase of the transplantation procedure.

Liver failure due to various mushroom toxicities is more common and more known than the ones caused by local foods, which are extremely rare (2). The toxicity in the present patient may be associated with a special feature of this plant. To our knowledge, this is the first report of fatal hepatic and renal failure caused by MS. In conclusion, wild plants, such as MS, can cause serious liver and renal toxicity, which may even result in death. Thus, physicians should be aware of the nutritional habits of the patients who are admitted with hepatic and renal toxicity.

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