Accidental fatal poisoning with Colchicum autumnale due to mistaken identification: a case report

Objective

Until the middle of last century use of wild edible plants was common in Estonia (1). In last decades populations knowledge in plants is decreased but with rising trends of healthy nutrition wild plants are gathering popularity again. There are trends of „fashion plants“ which are recommended by social media as „super foods” and often used by people who have no wider knowledge about herbs. The trend plant for last years has been Allium Ursinum – wild garlic. The law in Estonia allows to sell only selfgrown wild garlic, not picked in forest, but there is no actual control measures and nothing to stop people to collect Allium ursinum for their own use. There have been case reports from many places in Europe about poisonous plants mistaken for Allium ursinum including Colchicum autumnale and Veratrum album. (2,3). This paper presents a case report of fatal poisoning due to Colchicum autumnale mistaken for Allium ursinum.

Case report

Man 69 and woman 66 y. were hospitalised after eating homemade wild garlic pesto in the previous evening. Some hours later both had developed severe gastrointestinal symptoms but did not contact any health care facility. On the next day called ambulance and were admitted to North Estonia Medical Centre ER. Wife felt better and was later referred home. Husband’s condition deteriorated, he had signs of hepatic failure and cytolyisis. Poison Information Centre was contacted. Admitted to ICU, transferred to internal medicine ward next day. Became delirious, agitated, body temperature 38°C. Day five developed pancytopenia. Day seven transferred back to ICU; hypotonia, hypoxia, increasing multiorgan failure. Mental status deteriorated. Mechanical ventilation, dialysis, vassopressor treatment were started. Despite agressive treatment the patient deceased day nine.

Results

14.05.2017 Plant thought to be Allium ursinum eaten by 2 people. G/I symptoms in 2-3 hours
15.05. M 69 hospitalised due to persistent vomiting to internal medicine department. Cytolyisis in blood samples
17.05. Hepatic failure, admitted to ICU
18.05. Back in internal ward. 10 pm delirious, T 38˚C. No microbial growth in blood and urine samples
20.05. Pancytopenia, CRV 230, PCT 41
22.05. Hypotonia, tachycardia, hypoamia, Lact 4. Petechias on lower abdomen, icerus, haemorrhagies in the eyes. Back to ICU, norepinephrine infusion started
23.05. Deteriorates, multiorgan failure, bone marrow supression, started mechanical ventilation and renal dialysis. Norepinephrine 0.5 µg/kg/min
24.05. Death at 10 am

Post mortem Toxic gastroenteritis and colitis, toxic bone marrow injury, toxic liver injury, cytolyisis of splenic parenchyma, acute kidney injury, lung oedema, cerebral oedema, asclis.

Fig 1. Patsient condition changes 14.05. – 24.05.2017

Conclusions

After the fatal accident several articles and blog posts were published both by Estonian Poison Information Centre and botanists to rise awareness about dangerously similar looking plants and toxicity of Colchicum autumnale. Considering the gaps in general populations botanical knowledge it would be more useful in the future for Poison Information Centre to follow the wild plant trends on social media and identify and introduce to public the potential mistaken identification dangers for popular plants.

References

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5. Photo: Georg Kõre / Eesti Meedia / Scanpix 2017