A Case Report of Fungicial Poisoning

Uma Malaika Rapolu*, Nabeela Tarannum, Enara Bawani, Mohd Danish

Department of Pharmacy, Turkayamjal, Hyderabad, Telangana 501510, India

INTRODUCTION

Myclobutanil may be a conazole class fungicide. Mostly employed in food crops (like apple, banana, asparagus, beans, cranberry, grape, plum, soybean, tomato, strawberry) and in other commercial landscape. Moreover it's lower acute toxicity is seen. In animal study, it can affect reproductive ability. Workers in fields are mostly affected. Common symptoms include headache, eye irritation, itching, nausea, vomiting, abdominal pain, nose bleeding. A 39 year old male patient was brought to emergency department with chief complaints nausea, vomiting, seizures, loss of consciousness, and nose bleeding. Patient was provided with treatment upon admission.

Keywords: Myclobutanil, conazole, fungicide.

CASE REPORT

A 39 years old male patient who was an occasional ethanolic was remarked to the emergency department with complaint nausea, vomiting, seizures, loss of consciousness and nose bleeding in sight over consumption of myclobutanil poison

Upon admission into general medical aid unit the vitals were,
Temp: 98.6°F BP:120/90mmHg PR:88 bpm RR:18bpm No crepts

Laboratory investigation

Upon further investigations the patient had a standard haematological levels, serum electrolytes levels, on contrary the hepatic function test showed increase in total bilirubin, direct and indirect bilirubin and more over the ECG was abnormal which showed abnormal Sinus rhythm, Left atrial enlargement, R-S transition zone in v leads displaced to right.
### Lab Parameter | DAY-1 | Normal value
--- | --- | ---
HB | 13 gms% | 13-18 gms% |
WBC | 5400 c/cmm | 4000-11000 c/cmm |
RBC | 3.9 m/cmm | 4.3-5.7 m/cmm |
DLC=N+L+E+M+B | 79+36+03+00+00 | 1.5-4.5 lakhs/cumm |
PLATELETS | 1,90,000 | 1.5-4.5 lakhs/cumm |

### Lab Parameter | DAY-2 | Normal value
--- | --- | ---
SODIUM | 139 mmol/l | 135-145 mmol/l |
POTASSIUM | 3.3 mmol/l | 3.5-5.5 mmol/l |
CHLORIDE | 104 mmol/l | 98-105 mmol/l |
IONISED CALCIUM | 1.17 mmol/l | 1.15-1.35 mmol/l |
RBS | 90 mg/dl | 70-140 mg/dl |
Sr. CREATININE | 0.6 mg/dl | 0.9-1.3 mg/dl |
BLOOD UREA | 11 mg/dl | 7-40 mg/dl |

### Lab Parameter | Day 3 | Normal value
--- | --- | ---
AST | 23 | 0-35U/L |
ALT | 45 | 0-38U/L |
ALP | 91 | 30-115U/L |
TOTAL BILIRUBIN | 1.1 | 0-1.2 mg/dl |
DIRECT BILIRUBIN | 0.3 | 0.0-0.3 mg/dl |
INDIRECT BILIRUBIN | 1.9 | 0-1.2 mg/dl |
TOTAL PROTEIN | 4.8 | 6.4-8.3 g/dl |
ALBUMIN | 2.9 | 3.5-5.2 g/dl |
GLOBULIN | 1.5 | 2.9-3.1 g/dl |
A/G RATIO | 1.9 | 1-2 |

## Differential Diagnosis:

The patient was diagnosed by the history interrogation with patient's attenders and also the symptoms of fungicide poisoning like loss of consciousness, five episodes of vomiting and one episode of seizure and abnormal ECG supported above investigations and interrogation the patient was diagnosed with victim of myclobutanil poisoning.

## Treatment:

Upon admission the patient as there's not particular antidote the patient was firstly secured with dextrose normal saline and ringer lactate solutions for stability later the treatment was started with broad spectrum antibiotics, diazepam, proton pump inhibitors, ondansetron and cyanocobalmine.

The patient was monitored and treated for 6 days and later was discharged with proper counselling to the patient and family with discharge medication plan which was comprised of ephedrinospor antibiotic, multi vitamins, proton pump inhibitors and calcium supplementation. The patient came with complaint of vomiting, seizures, loss of consciousness visible over consumption of myclobutanil poison.

## Discussion:

Myclobutanil may be a conazole class fungicide. Mostly workers in food crops and commercial landscape are affected. Myclobutanil poisoning is quite rare. Common symptoms include headache, eye irritation, itching, nausea, vomiting, abdominal pain, nose bleeding. Myclobutanil can affect cardiovascular system (heart rhythm, hypovolemia, hypotension), systema respiratorium (pulmonary edema, bronchospasm), and seizures also are seen.

Patient was brought to the emergency department with chief complaint of nausea, nose bleeding, vomiting, seizures, loss of consciousness in view over consumption of myclobutanil poison.

As there's no definite antidote for fungicide poisoning the patient was secured with intravenous saline and broad spectrum antibiotics, proton pump inhibitors and was monitored and treated for 4 days, later was discharged with proper counselling to patient and patient's attenders for a healthy socio-family life, cessation of alcohol, discharge medication plan which encompassed of multivitamins and calcium supplementations.

## References: