ALL-TRANS RETINOIC ACID SYNDROME (ATRA): A CASE REPORT

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INTRODUCTION

Acute myeloid leukemia (AML) is a hematological malignancy associated with life-threatening coagulopathy. All trans retinoic acid (ATRA) therapy is one of the treatment approaches of AML M3.

Acute respiratory failure may occur in patients receiving ATRA therapy, which require close monitoring for respiratory function in patients receiving this medication.

METHODS

- A 34 year old female admitted to intensive care unit with dsypnea.
- The patient have previous history of AML M3.
- After first ATRA treatment, she suffered from **hypoxia, respiratory failure** and **transferred to the intensive care unit (ICU)**.
- **Hemodialysis** and **plasmapheresis** were applied alternately during the treatment for cytokine removal.
- Mechanical ventilation and drug therapy were started.

RESULTS

The patient's **hemoglobin, Oxygen saturation and blood pressure** returned to normal after mechanical ventilation support, antihypertensive therapy, nutritional support with Total Parenteral Nutrition, antibiotic therapy and erythrocyte suspension replacement therapy for low hemoglobin and hematocrit level.

CONCLUSION

It should be considered that ATRA can cause respiratory problem such as life-threatening **Acute Respiratory Distress Syndrome**. Close monitoring and respiratory assessment must be done. Early intervention and discontinuation of ATRA may be life saving in this group of patients.

Key Words: ATRA, AML, chemotherapy toxicity, respiratory failure, mechanical ventilation