

# ACETAMINOPHEN (**APAP**) AND ACETYLSALICYLIC ACID (**ASA**) TOXICITY

**Practical Clinical Toxicology**

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## PART 1

Acetaminophen  
(APAP)  
Toxicity continued...

# DIAGNOSIS

APAP toxicity Identify by

- **Clinically:** the symptoms and signs of hepatic injury
- **Biochemical parameters**

# TREATMENT

- Early treatments are essential for assuring recovery. Ipecac syrup could be indicated

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- Most of Glutathion is lost in the digestive tract and cannot effectively raise intracellular Glutathione

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- efficacy decreases when administered beyond 8hrs.  
although it is beneficial up to 36 hrs.

# N-ACETYLCYSTEINE(NAC)

## • **Complications**

- Orally: nausea and vomiting common, diarrhea.
- Intravenous: anaphylactic reactions and anaphylaxis possible.
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## PART 2

# Acetyl Salicylic Acid (ASA) Toxicity



# ACETYL SALICYLIC ACID (ASA) TOXICITY

## Epidemiology

- There are approximately 18.000 aspirin poisonings per year in US

# TOXICOLOGY

- ASA is rapidly absorbed in the stomach over the small intestine.

# ASA overdose

- Unique toxic effects include:
- Reye s Syndrome

# ACUTE ASA POISONING

- Early Acute: Nausea, Vomiting, vertigo, fever, diaphoresis, tinnitus, tachypnea.

## CHRONIC ASA POISONING

- Mainly a CNS constellation of tinnitus, deafness, dyspnea

# DIAGNOSIS

- Obtain serum ASA: therapeutics 15-30 mg/dl

# Treatment

- Gastric lavage and AC

# REFERENCES

- 1- Gossel TA, Bricker TD, (Eds.); Principles of Clinical Toxicology; latest edition.*
- 2- Viccellio P, (Ed.); Handbook of Medicinal Toxicology; latest edition.*
- 3- journals of pharmacology and toxicology*