Pharmacology 1 and Prescription Knowledge

Local hormones

Refer lecturer for course updated notes.

Students are oblidged to follow the courses for evaluation process and presented notes are preliminary drafts for the whole evaluation process.

- Introduction of local hormones
- Eicosanoids
- Cytokines
- Histamine
- 5-Hydroxytryptamine (Seratonin)
- Nitric oxide
- Endothelin

Eicosanoids

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prostaglandins
thromboxanes prostanoids
leukotrienes
lipoxins
hydroxyeicosatetraenoic acids (HETEs)
hepoxilins
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- Biosynthesis
- Main sites of eicosanoid biosynthesis
- Main steps of eicosanoid biosynthesis
- Biological effects of eicosanoids

- Nature and Functions of Prostaglandins
- Pathological functions of prostaglandins and connections with stress
- Some physiological functions of prostaglandins with connections to stress

- Synthesis and biological activity of prostaglandin analogues
- Model for Endocrine control of pulsatile PGF2alpha secretion during luteolysis in sheep

- Histamine
 - Synthesis
 - Storage
 - Release
 - Histamine receptors and effects

- Histamine H1 antagonists
 - Mechanisms and effects
 - Clinical use
 - Toxicity and interaction
- Histamine H2 antagonists

- Serotonin (5-Hydroxytryptamine, 5-HT)
- 5HT1 receptors
- 5HT2 receptors
- 5HT3 receptors
- 5-HT antagonists
- Mechanisms and effects
- Clinical use
- Toxicity

- Ergot alkaloids
- Toxicity

- Vasoactive peptides
- angiotensin, bradykinin, atrial natriuretic peptide, vasoactive intestinal peptide, substance P, calcitonin gene-related peptide, vasopressin, glucagons, and opioid peptides
- Mechanism os actions

- Angiotensin and its antagonists
- Bradykinin
- Atrial natriuretic peptide
- Endothelin
- Vasoactive Intestinal Peptide, Substance P, Calcitonin Gene-related Peptide And Neuropeptide Y