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Parathyroid Disease



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Parathyroid Disease

Introduction

- The **parathyroid glands** are small endocrine glands in the neck, usually located behind the thyroid gland .They produce Parathormone (PTH)
- The parathyroid glands were discovered by *Ivar Viktor Sandström* a Swedish medical student, in 1880 It was the last major organ to be recognized in humans
- Parathyroid glands and parathyroid hormone evolved with the emergence of the tetrapods, reflecting a need for new controls on calcium homeostasis in terrestrial, rather than aquatic, environments

Parathyroid Disease

Clinical Features

Due to Parathyroid Disorders



Disorders of Calcium Homeostasis

Parathyroid Disease

Primary Hyperparathyroidism - Excess PTH

- Commonest Disorder of the parathyroid glands
- >85 % Due to a single adenoma
- <10% Due to Hyperplasia of more than 1 gland
- < 5% Carcinoma
- Excess hormone produces effects on the Bones, Kidney and GI tract - characteristic features

Parathyroid Disease

Primary Hyperparathyroidism- Clinical Features

- Bones - Decalcification **Subperiosteal erosions,** Fractures ,Cysts (pseudo tumours) - PAIN
- Stones - Increased Ca Urinary stones
- Abdominal Groans - Increased Gastrin- Ulcers
- Acute Pancreatitis
- Psychic moans - behavioral changes due to Ca & Pain

*1935 Albright described primary HPTH with only nephrolithiasis
(the most common presentation)*

Parathyroid Disease

Bones



Parathyroid Disease



Parathyroid Disease



**Stones
(Urinary)**



Parathyroid Disease

Psychic Moans

Effects of Hypercalcaemia on Neurons

Parathyroid Disease

Asymptomatic Disease

Parathyroid Disease

- Approximately 1 in every 1,000 individuals.
In women over the age of 45: 1 in every 500
- Why is Parathyroid disease Uncommon in Sri Lanka ?
- Is it really ?
- We are not Looking for it
- Is it different to the west - Indian experience
Unique clinical characteristics of primary hyperparathyroidism in India.
Mishra. S K , Agarwal G , Kar. D K , Gupta. S K , Mithal. A , Rastad. J,
Br-J-Surg. 2001 May; 88(5): 708-14
- Unreliable Calcium estimates

Parathyroid Disease

In Whom Should we look ?

At least in high risk Patients

- Recurrent or Multiple Urinary Calculi
- Unexplained Abdominal Pain
- Recurrent Acute Pancreatitis without an obvious cause
- Unexplained confusion

Parathyroid Disease

- Other forms of Parathyroid disorders are uncommon
- Carcinoma about 1%
- 2ry & Tertiary Hyperparathyroidism in Renal disease

Parathyroid Disease

- Majority of Parathyroid disorders are curable by Surgery
- Look For it

Parathyroid Disease

