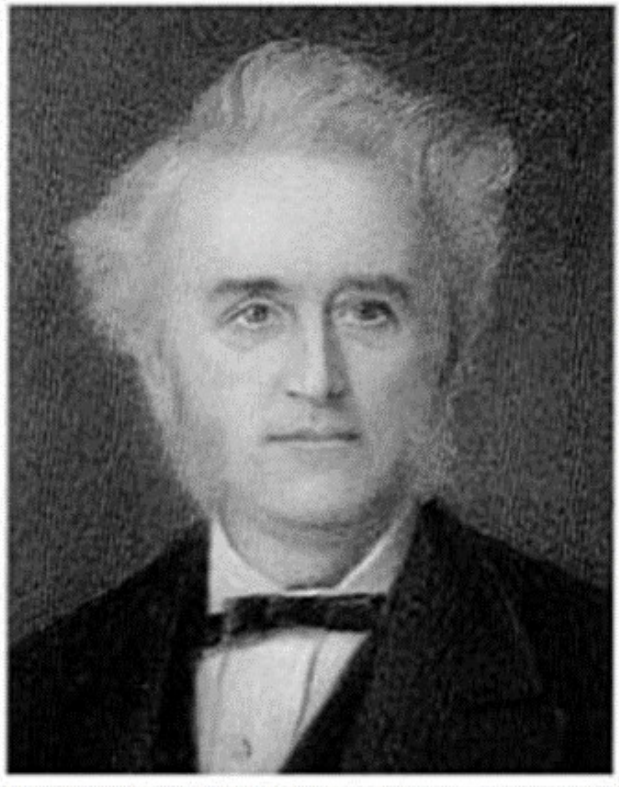


DOWN SYNDROME

By:
SUNNY KEJ

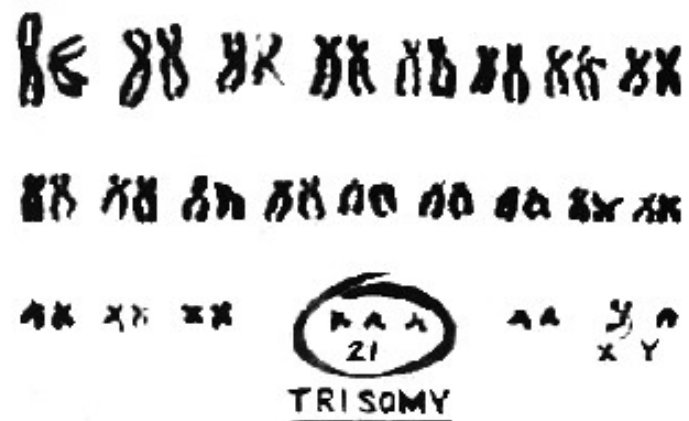


What is Down Syndrome ?

It is a Neuro-Developmental syndrome named after John Langdon Haydon Down.

He first described the physical and behavioral characteristics of it in 1862.

Today, as per the CDC it continues to be the most common chromosomal disorder with an incidence of 1:700 live births.



Cause

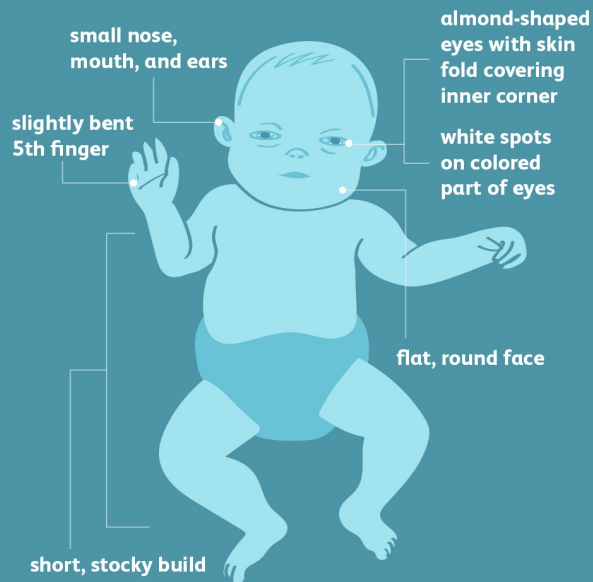
Down Syndrome is a genetic disorder caused by a random error in cell division known as **nondisjunction** *. This abnormal cell division results in Extra Chromosome in Chromosome 21 after Meiotic cell division.

It is also known as **Trisomy 21** (47 chromosomes - one extra chromosome 21 in cells).

* 90-95% of T21 due to Nondisjunction

Down Syndrome

Physical Features*



*Intellectual disabilities and developmental delays vary by individual.

verywell

Physical Features

This syndrome presents with certain features :

Flat, Broad Face and Widely Spaced Eyes

Flat-bridged Nose

Epicanthic Folds and Oblique Eyelid Fissures

Smooth Philtrum – similar to FAS

Furrowed Lower Lip

Tongue Fissures

Lingual Papillae Hypertrophy

Various Levels of Mental Disability.

A



B



Oral Features

Some Oral Features include :

An arched palate and weak tongue muscles lead to an open mouth position

Increased levels of Periodontal disease

May have large tongues or they may have an average size tongue and a small upper jaw that makes their tongue too large for their mouth

Delayed tooth eruption

Fewer teeth present with microdontia and perhaps smaller roots too

Treatment



Lara Antal

Down Syndrome isn't a disease or condition that can be managed or cured with medication or surgery. The goal of treatment is to address the variety of health issues, medical conditions, and physical, developmental, and intellectual challenges that people with Down Syndrome may experience throughout their life.

Options can range from Physical Therapy and Early Intervention to Assistive Devices, Medications, and even Surgeries.

Role of Dental Hygienist



Provide oral care in an environment with few distractions, to help achieve patient cooperation. Gaining the patient's trust is the key to successful treatment.

Plan a step-by-step evaluation - Several visits may be needed to accomplish these tasks.

Try to be consistent in all aspects of providing oral health care. The more consistency you provide for your patients, the more likely that they will be cooperative

Making a difference in the oral health of a person with Down syndrome may go slowly at first, but determination can bring positive results—and invaluable rewards.



Each person with Down syndrome has different talents and the ability to thrive.

World Down Syndrome Day is observed on each year on March 21, to create awareness about Down syndrome.

The 21st day of March (3) was selected to signify the Uniqueness of the Triplication of the 21st chromosome which causes Down Syndrome.