Rubinstein-Taybi syndrome

Genetics

-CREBBP (CREB-binding protein), EP300 (histone acetyltransferase-p300)

-AD; mostly de novo; empiric recurrence risk for sibs is less than 1%

Clinical findings/Dysmorphic features

-Broad and often angulated thumbs and great toes; short stature; moderate to severe ID

-Facial: downslanted palpebral fissures, low-hanging columella, high palate, grimacing smile, and talon cusps ("cusp-like" projections located on the inside surface of the affected tooth)

Etiology

-Prevalence of 1:100,000 to 1:125,000 in the Netherlands

Pathogenesis

-CREBBP mutations cause abnormal histones-acetylation

Genetic testing/diagnosis

-CREBBP and EP300 only genes known to be associated with Rubinstein-Taybi syndrome

-CREBBP: FISH (~10%) and sequencing (40-60%), EP300 (~3%-8%); 30% unknown