



# Rubinstein-Taybi Syndrome (RTS) For Healthcare Providers

This is a customized health care provider version of our website. Please visit the main website to find more comprehensive information for families and schools (www.gemssforschools.org).

### Physical characteristics and/or symptoms

Note: not all people with RTS will have all of these features.

#### The most prevalent findings in people with RTS

- Differences in facial features
  - Small head
  - Downslanting eyes with highly arched eyebrows and long eyelashes
  - Thick scalp
  - Prominent beaked nose
  - Small mouth
  - Low set ears
- Thumb and first toes
  - Broad and sometimes bent
- Short stature
  - Average Height
    - Males: 5 feet
    - Females: 4 feet 10 inches
- Developmental delay and intellectual disability
- Behavior
  - o ADHD
  - Repetitive movements
  - o Anxiety, depression, mood instability and aggression in adulthood

#### Other Medical Issues that may be associated with RTS

Orthopedic

Copyright, revised May 2018; New England Genetics Collaborative / Institute on Disability

www.gemssforschools.org

- Dislocated kneecaps
- Scoliosis
- Joint problems
- Vertebral abnormalities
- Kidney problems or disease
- Vision
  - Strabismus
  - Cataracts
  - Tear duct blockage
  - o Glaucoma may be present at birth or early in life
- Hearing
  - Frequent otitis media
  - Mild hearing loss
- Dental
  - Talon cusps, an accessory cusp-like structure on the lingual side of the tooth, usually occurring on the maxillary incisors of the permanent dentition
  - Overcrowding
  - Narrow palate
- Cardiac
  - Approximately one third have cardiac malformations
  - Most frequently patent ductus arteriosus, VSD, and ASD
- Gastrointestinal
  - Severe constipation
  - o GERD
  - Vomiting/Diarrhea
- Frequent upper respiratory infections
- Obesity
  - Obstructive sleep apnea
- Anesthesia may be a problem for some people with RTS
- Seizures
- Increased risk of developing non-cancerous and cancerous tumors
  - Certain brain tumors
  - o Leukemia
  - o Lymphoma

#### Recommended Routine Surveillance

Copyright, revised May 2018; New England Genetics Collaborative / Institute on Disability

- Monitor of growth and feeding
- Routine monitoring for cardiac and renal anomalies
- Annual hearing and eye evaluations
- Routine dental care

### **Emergency Protocols**

There are no specific emergency protocols for this particular condition as it is not typically associated with episodes of sudden and serious medical decompensation.

- Emergencies should be handled as with any child.
- If seizures are present, the following seizure action plan may be useful: https://www.aap.org/en-us/Documents/Seizure Action Plan for%20School.pdf

### Specialists Who May Be Involved

Follow up is need on a case-by-case basis. A multidisciplinary team approach to best meet the child's individual needs is recommended.

- Cardiologist
  - Structural heart defects
- Dental
  - Talon cusps, an accessory cusp-like structure on the lingual side of the tooth, usually occurring on the maxillary incisors of the permanent dentition
- Developmental evaluation
  - Speech therapy with emphasis on nonverbal methods of communication
  - Physical therapy
  - Occupational therapy
- ENT
  - Hearing loss
  - Obstructive sleep apnea
- Gastroenterologist:
  - Significant feeding problems may occur
  - Gastroesophageal reflex
  - Constipation
- Geneticist / Genetic Counselor:
  - o Diagnosis
  - Coordination of care
  - Genetic risk for family

Copyright, revised May 2018; New England Genetics Collaborative / Institute on Disability

- o Clinical trials
- Hematology/Oncology
  - o Treatment for leukemia or other malignancies
- Neurology
  - Monitor seizures
- Nutritionist
  - Weight control
- Orthopedists
  - Monitor gait impairment
  - Scoliosis
  - Muscular hypotonia
- Ophthalmology
  - Strabismus
  - Cataracts

### Sample Forms

• Sample paragraph to be used for Letters of Medical Necessity or Letters to the school:

My patient	has been diagnosed with Rubeinstein-Taybi
syndrome. Distinct f	acial features, broad thumbs and toes, short stature and moderate
and to severe intelle	ctual disability characterize Rubenstein-Taybi syndrome. Medical
complications with F	Rubenstein-Taybi syndrome include management of seizures, growth
and feeding difficult	ies, cardiac defects, gastrointestinal reflux, and constipation,
Because of these,	needs the following accommodations.

## Seven Important Aspects of School Life

"Rubenstein-Taybi Syndrome at a Glance" will help you talk with parents and schools about:

- Medical / Dietary Needs
- Education Supports
- Behavior & Sensory Supports
- Physical Activity, Trips, Events
- School Absences & Fatigue
- Emergency Planning
- Transitions



Copyright, revised May 2018; New England Genetics Collaborative / Institute on Disability

### Resources

#### **Genetic Home Reference**

https://ghr.nlm.nih.gov/condition/rubinstein-taybi-syndrome

#### GeneReviews

https://www.ncbi.nlm.nih.gov/books/NBK1526/