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The KBG Foundation is dedicated to providing support, assisting in research programs and advocating to raise awareness about the syndrome.

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**INTERNATIONAL**  
**KBG**  
**Syndrome**  
**AWARENESS**  
**DAY JUNE 11TH**

*every link matters*

**What is  
KBG Syndrome?**

# What is KBG Syndrome?

KBG Syndrome is caused by a mutation in the ANKRD11 gene at location 16q24.3 (maybe more) which creates a shortening of a scaffolding protein in that region.



This short protein may be completely ineffectual or may be somewhat functioning which could contribute to the variety and severity of the symptoms.

## APPEARANCE

Nearly all patients present with large upper front teeth, bushy eyebrows

and triangular faces. The 'KBG appearance' is quite distinctive and is usually the first noticeable trait along with developmental delay and other bone anomalies.

## INCIDENCE

New research suggests that less than 200 individuals worldwide have been diagnosed with KBG Syndrome. For no known reason, males seem to be more affected than females.

## PROGNOSIS

KBG has an excellent prognosis with no known impact on longevity.

## TREATMENT

There is no singular treatment for KBG Syndrome but is determined on a case by case basis as symptoms arise.

# Common Traits/Symptoms

Facial dysmorphisms  
Autistic Characteristics  
Abnormal hair implantation  
(low in front or back of skull)



Brachy-clinodactylous 5th finger  
(short/curved pinky)

Macrodonia (large teeth) with oligodontia  
(absence of more than 6 teeth)  
Abnormal EEG with or without seizures  
Cognitive deficits/psychomotor delay  
Anteverted nostrils (upturned nose)



Short femoral necks/hip dysplasia  
Cutaneous syndactyly, toes II/III  
Palatal defects (including uvula)

Webbed/short neck  
Mild synophrys  
Brachycephaly/turricephaly  
Sternum abnormalities  
Cryptorchidism



Abnormal ribs/vertebrae  
Epicanthal folds  
Delayed bone age  
Abnormal spine curvature  
Ptosis



Prominent/high nasal bridge  
Long philtrum  
Short hand tubular bones  
Hearing loss  
Wide eyebrows  
Wormian bones in skull  
Thin upper lip  
Prominent/anteverted ears  
Strabismus  
Congenital heart defects



1975



The KBG Phenotype is defined by Herrmann, Pallister, Tiddy, Opitz  
PMID: 1218237



2004

Genetic inheritance confirmed  
PMID: 21782149

2011



ANKRD11 genetic mutation identified  
PMID: 21782149



2012

16q24.3 Gene location reported  
PMID: 22307766

2014



C - terminus leads to KBG mutation  
PMID: 25413698



2015