# Klippel-Feil Syndrome Treatment Guidelines

# Klippel-Feil syndrome

Klippel-Feil syndrome (KFS) is a rare genetic disorder that affects the development of the bones in the spine. This condition is characterized by the fusion or abnormal joining of two or more vertebrae in the neck region, resulting in a shorter-than-normal neck.

# **Treatment options**

The treatment of KFS focuses on addressing the specific symptoms and associated physical findings unique to each individual.

#### Cervical collars

For individuals with mild symptoms, wearing a cervical collar may help alleviate pain and discomfort. This type of treatment is most effective when used for short periods of time, as prolonged use may lead to muscle weakness and dependency on the collar.

### **Braces**

In some cases, a brace may be recommended to provide support and stability to the affected area. Braces can help improve posture and prevent further progression of the curvature. However, bracing is most effective when used in conjunction with other forms of treatment such as physical therapy.

#### **Tractions**

Traction involves the use of weights, pulleys, and harnesses to stretch and realign the spine. This treatment is typically used for individuals with more severe cases of KFS, as it can be uncomfortable and may require frequent adjustments.

# Physical therapy

A physical therapist can help individuals with KFS improve their range of motion, muscle strength, and overall mobility through targeted exercises and stretches. They can also provide guidance on proper posture and body mechanics to prevent further progression of the curvature.

## Non-steroidal anti-inflammatory drugs (NSAIDs) and various pain medications (analgesics)

These medications can help manage pain and inflammation associated with KFS. However, long-term use of NSAIDs may have adverse effects on the body, so they should be used under the guidance of a healthcare professional.

# Surgical repair of certain abnormalities

In severe cases of KFS, surgery may be recommended to correct any structural abnormalities related to the disorder. The surgical procedures will vary based on the severity of anatomical abnormalities, their associated symptoms, and other relevant factors.

## References

Menger, R. P., Rayi, A., & Notarianni, C. (2021). *Klippel Feil syndrome*. PubMed; StatPearls Publishing. <a href="https://www.ncbi.nlm.nih.gov/books/NBK493157/">https://www.ncbi.nlm.nih.gov/books/NBK493157/</a>

National Organization for Rare Disorders. (2023, August 8). *Klippel-Feil syndrome*. <a href="https://rarediseases.org/rare-diseases/klippel-feil-syndrome/">https://rarediseases.org/rare-diseases/klippel-feil-syndrome/</a>