# **Alar Ligament Test**



# <u>Purpose</u>

To assess the integrity of the alar ligaments and upper cervical stability.

# 1. Side bending stress test

Patient position:

• Sitting or supine

Therapist hand placement:

- One hand stabilizes the spinous process of C2 with a pincer grip.
- Other hand, slight compression on the crown of the head and then passively side bending the head.

### 2. Rotation Stress test

Patient position:

- Sitting or supine
- Therapist hand placement:
- One hand stabilizes the spinous process of C2 with a pincer grip.
- Other hand, slight compression on the crown of the head and then passively rotates the head.

### **Outcome**

If the ligament is intact, minimal side flexion and rotation will occur, with a strong capsular end feel and a solid stop. If there is excessive motion in the opposite direction for both the tests, there is instability due to an increase in the neutral zone in the joint.

## **Reference**

Magee, D. J., Manske, R. C., J., D., & C., R. (2021). Orthopedic Physical Assessment. Elsevier Gezondheidszorg.

# ANPT Concussion/mTBI Knowledge Translation Task force

Handout Created by:
Naseem Chatiwala, PT, DPT,
MS; Annie Fangman, PT,
DPT; Michelle Gutierrez, PT,
DSc; John Heick, PT, DPT,
PhD; Ethan Hood, PT, DPT,
MBA; Victoria Kochick, PT,
DPT; Becky Bliss, PT, DHSc,
DPT; and Pradeep Rapalli,
PT, DPT

Clinical Practice Guideline Physical Therapy Evaluation and Treatment After Concussion/Mild Traumatic Brain Injury

Journal of Orthopedic & Sports Physical Therapy; April 2020: Volume 50, Issue 4



This is for informational and educational purposes only. It does not constitute and should not be used as a substitute for medical advice, diagnosis, rehabilitation, or treatment. Patients and other members of the general public should always seek the advice of a qualified healthcare professional regarding personal health and medical conditions. The Academy of Neurologic Physical Therapy and its collaborators disclaim any liability to any party for any loss or damage by errors or omissions in this publication.

© 2023 by the Academy of Neurologic Physical Therapy.