# **Patellar Grind Test**

Patient's name: Margaret Thompson Age: 76 Gender: Female

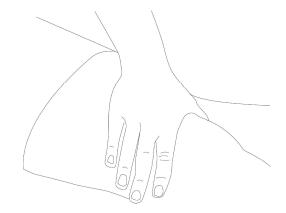
**Examiner:** Dr. James Palmer Date: Nov. 8, 2024

### **Equipment needed**

Examination table or flat surface

### **Test steps**

- 1. Have the patient lie supine (on their back) with the knee extended, while you stand on their side.
- 2. Place the web of your hand just superior to the patella. Alternatively, you may place your hand directly on the patella.
- 3. Apply consistent downward pressure on the patella. Ensure that you do not exert excessive force to avoid triggering a false positive.
- Instruct the patient to contract their quadriceps muscle, attempting to extend the knee against your resistance.
- 5. Look for any signs of pain or grinding (crepitus) beneath the patella during this contraction.
- 6. Repeat the test on the unaffected side.
- 7. Repeat the test to confirm using both positions (superior to the patella and directly on top of it) and varying amounts of pressure on both the affected and unaffected leg. You may also repeat while applying pressure from different angles.



## Results and interpretation

- Negative: The patient does not experience pain and there is no grinding sensation during the contraction. Patient is able to complete the test.
- Positive: The patient experiences pain during the contraction, there is crepitus, and/ or the patient is unable to continue the test because of pain.

#### **Additional notes**

Patient reports persistent knee pain and grinding sensation during stair climbing and prolonged walking, particularly in the affected knee. Crepitus was noticeable during the test, suggesting possible patellofemoral issues. Follow-up imaging and referral to physical therapy are recommended for further evaluation and management.

Fredericson, M., & Yoon, K. (2006). Physical examination and patellofemoral pain syndrome. *American Journal of Physical Medicine & Rehabilitation*, *85(3)*, 234–243. <a href="https://doi.org/10.1097/01.phm.0000200390.67408.f0">https://doi.org/10.1097/01.phm.0000200390.67408.f0</a>

Magee, D. J. (2014). Orthopedic physical assessment (6th edition). Elsevier.

Physiotutors. (2017). Clarke's Sign / Patellar Grind Test | patellofemoral pain / chondromalacia patellae [YouTube Video]. YouTube. https://www.youtube.com/watch?v=pRqnODPqxFs