

# SURGICAL AND NON-SURGICAL TREATMENT OF THUMB BASE OA: WHY SURGERY SHOULD BE THE LAST RESORT AND WHICH FACTORS DETERMINE TREATMENT SUCCESS

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Osteoarthritis (OA) is the second-most common musculoskeletal disorder, leading to pain and functional limitations with a high social and economic burden (Cross et al., 2014). OA can affect every joint in the body, but it is most common in the knee, hip, spine, and hand (Pereira, 2011). Within the hand, the thumb base is the most affected joint. In the general population, radiographic thumb base OA is more prevalent in females, is strongly associated with age, and can increase to almost 40% (Van der Oest, 2021a).

Compared to hip and knee OA, evidence of the optimal treatment of thumb OA is much more scarce (Macri et al., 2023). As in hip and knee OA, treatment guidelines recommended a stepped-care approach, starting with nonsurgical treatment, followed by surgical treatment if needed (Kloppenborg et al. 2019). It is important to optimize the results of nonsurgical treatment because, although surgery for thumb OA is widely accepted, the results of this surgery are not perfect; studies have reported that 14-33% of patients report that they would not undergo surgery again and the median absence from work is 15 weeks (Van der Oest, 2021b).

In this presentation, I will describe what we know about the rehabilitation treatments of thumb OA. The nonsurgical treatment can start with combinations of advice, injections, exercise and splinting. While previously unknown, hand rehabilitation can be very successful in avoiding surgery. In several series, we have shown that 85-90% of patients do not undergo surgery after hand rehabilitation. This effect lasts even after longer than the five years of follow-up (Esteban Lopez, 2023). When comparing different rehabilitation treatments, adding exercise to splinting alone increases pain reduction (Wouters, 2019).

An essential element in treating patients with thumb OA is the patient mindset. Positive outcome expectations and a better understanding of illness lead to better treatment outcomes and more patient satisfaction (Hoogendam, 2021). At the same time, patients have less positive outcome expectations of nonsurgical OA treatment than OA surgery (De Ridder, 2023). Therefore, I will discuss that expectation management techniques could be tailored to individual patients to optimize the overall treatment effect.

**Keywords:** osteoarthritis, rehabilitation, surgery, thumb, hand, pain

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