## TREATMENT OF TRIGGER FINGER: A LITERATURE REVIEW

## Zelenschi Valentin<sup>1</sup>, Ursu Sergiu<sup>1</sup>

<sup>1</sup>Department of Orthopaedics and Traumatology, *Nicolae Testemitanu* SUMPh, Chisinau, Republic of Moldova.

**Introduction.** A special section in hand surgery is dedicated to "trigger finger" disease, a common disabling disorder of the upper limb. trigger finger disease can occur at different ages, from children to geriatric patients. The lifetime risk of occurrence is between 2 and 3%. Incidence is 6 times higher in the female population. It may occur in one or more fingers on each hand and may be bilateral. The main cause of trigger finger results from a mismatch between the dimensions of the flexor tendon and its tendon sheath, leading to faulty gliding of the tendon, resulting in pain, clicking and functional difficulties. Patients present with structural changes in the pulley system of the fingers and tendon sheaths

**Aim of the work.** The aim of our study is to investigate the concept, clinic, methods of diagnosis and treatment of trigger finger and to identify the particularities of the incidence of this disease according to sex, age, professional occupation, affected fingers, degree of severity according to Quinnell, the evolution of the disease over time, until and after surgical treatment.

**Material and methods.** More than 60 scientific articles, selected from PubMed, Research Gate, Google Scholar and Elsevier databases, mostly published in the last ten years, were included in the study. The inclusion criteria were as follows: full-text, open access article addressing the problem under investigation. The data obtained were subsequently systematized and analysed.

Results. In the medical literature there is a lack of a standardized protocol considered to be "best practice" for this condition. Researchers believe that a multidisciplinary consensus would be desirable to standardize and optimize the treatment of trigger finger. Therapeutic approaches can be divided into two main categories: conservative treatment and surgical treatment. Depending on the severity of the symptoms and the speed of progression of the pathological process, the methods of treatment of the trigger finger include: immobilization with orthosis, drug treatment, physiotherapeutic treatment and surgical treatment, which in turn consists of open surgery and percutaneous surgery. Conservative treatment with orthotics, medication and physiotherapy is most effective in the early and moderate stages of the disease. In severe cases the trigger finger is treated surgically. As for the technique of surgical treatment, too, there is no single opinion. There is discussion about the priority of open or closed ligamentotomy, choice of surgical approach, total or partial ligamentotomy of the annular ligament, resection of the degeneratively changed portion of the annular ligament or without it. No consensus was reached whether partial tenotomy or total removal of the thickened portion of the tendon or without this surgical maneuver is more effective. With early function after surgery or immobilization of the operated segment.

Conclusions. From the analysis of the literature sources studied we conclude that there is no consensus among scientific researchers on the optimal therapeutic approach to the trigger finger. Further large-scale studies are needed to develop a treatment algorithm in the two age groups of adults and children. The treatment of trigger finger includes conservative and surgical methods, applied depending on the severity of the disease manifestations. Conservative treatment consists of immobilization with orthoses, drug treatment with NSAIDs and corticosteroids and physiotherapy Basic treatment is surgical, which involves open or percutaneous surgery to release the affected pulley.

**Keywords:** trigger finger, hand surgery, ligamentotomy, orthotics, physiotherapy.