# The Effect Of Finger Hold Relaxation Technique For Reduce Pain **In Post Appendectomy Patients**

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#### ABSTRACT

Appendectomy is a surgical procedure for appendicitis, the effect of appendectomy is pain. Pain is an unpleasant sensory and emotional feeling. Non-pharmacological pain management with finger hold relaxation techniques will trigger endorphins produced by the body to relieve pain. This study aims to determine the effect of finger hold relaxation techniques to reduce pain in post appendectomy patient based on a literature review. The design used in this research is a literature review study, with the criteria for post appendectomy literature, pain, finger hold relaxation techniques published in 2017-2020. There is an effect of the finger hold relaxation technique to reduce pain intensity in post-appendectomy patients with a significant change in pain intensity with an average of the 5 reviewed journals showing a p-value of 0.000 < 0.05. Finger hold relaxation techniques can influence reduction of pain intensity in postappendectomy patients

**Keywords:** Post Appendectomy, Pain, Finger Hold Relaxation Technique.

#### INTRODUCTION

Appendicitis is a problem that most often arises due to inflammation of the vermiform appendix or appendix (Mardiah *et al.*, 2017). This inflammation requires immediate appendicectomy to prevent dangerous complications such as peritonitis and abscess (Indrawan, 2019). According to the World Health Organization (WHO) (2018), the incidence of appendicitis reaches 7% of the world's population, appendicitis is the most common abdominal surgical emergency in the United States with 734,138 people in 2017 and increased to 739,177 people in 2018 (Stiyorini & Noorratri, 2021).

According to the Indonesian Ministry of Health (2017), appendicitis cases reached 75,601 people in 2017 (Ananda et al., 2021). Based on data from the Lampung Health Office in 2016, there were 970 cases of appendicitis in Bandar Lampung city (Sani et al., 2020). Based on data obtained from RSUD Dr. H. Abdoel Moeloek Lampung Province in 2017-2019, the incidence of appendicitis reached 116 people (Wijaya et al, 2020). On average, appendicectomy surgery was performed (Ananda et al., 2021).

Appendicectomy is an invasive procedure performed by opening the abdominal wall layer and cutting the inflamed appendix to solve the problem of appendicitis (Wati et al., 2020). Appendicectomy will cause postoperative effects in the form of pain (Amalia & Susanti, 2014). Pain is an unpleasant feeling or sensation felt by the client, the pain experienced by the client post appendicectomy surgery is caused by tissue damage due to an incision or incision during surgery (Maulani, 2021).

Pain management is divided into two, namely pharmacological and non-pharmacological management. One of the relaxation techniques that can be done in non-pharmacological management in post appendicectomy clients is the finger hold relaxation technique (Wati & Ernawati, 2020). The finger hold relaxation technique is a relaxation technique that is directly related to the flow of energy in the body through the fingers (Pinandita et al., 2012). In the finger area there are reflection points that provide stimulation spontaneously when grasped. The stimulation sends electrical waves to the brain which are then processed quickly and forwarded to the nerves in the disturbed body parts (Hayat et al., 2020).

The finger-grip relaxation technique naturally triggers the endorphin hormone, which is a natural analgesic produced by the body as a pain reliever (Hasaini, 2020). Based on Hasaini's research (2020), the finger-grip relaxation technique is proven to have an effect in reducing the pain scale. The results in his research, namely before the finger grip relaxation was carried out, the average value was 4 which was categorized as moderate pain, after the finger grip relaxation was obtained an average value of 1.73 which was categorized as mild pain. The p-value result is 0.000 (<0.05). This shows that there is an effect of finger grip relaxation techniques to reduce pain in post appendicectomy clients.

#### **METHOD**

The research method used in this study is literature review using electronic databases. Article searches were obtained from the Google Scholar and Proquest databases using a pre and quasi-experiment design. The keywords in the article search were post appendicectomy, pain and finger grip relaxation technique published in 2017-2020.

## **RESULT**

The results of research conducted by Rasyid, Norma & Samaran (2019) show that there is an effect of providing finger-grip relaxation techniques on reducing the pain scale in post-appedictomy patients as evidenced by a p-value of 0.000. The results of research conducted by (Sulung & Rani (2017) show that before the finger grip relaxation technique is performed, the average pain scale is 4.80 with pain intensity 4-6, after the finger grip relaxation technique is obtained, the average pain scale is 3.87 with pain intensity 3-5. The results of research conducted by (Hayat, Ernawati & Ariyanti (2020) show a decrease in the intensity of the pain scale in post appendicectomy patients who experience pain with a p-value of 0.000 <0.05 so that H0 is rejected and H1 is accepted, meaning that there is an effect of the finger grip relaxation technique to reduce pain in post appendicectomy patients. The results of research conducted by (Aswad, 2020) show the effect of finger-grip relaxation techniques to reduce the intensity of the

pain scale in post appendicectomy clients. In his research, the p-value was 0.000, which means that there is an effect of the finger grip relaxation technique to reduce pain in post appendicectomy patients. The results of research conducted by (Dikson, Toki & Cenona, 2019) showed a p-value of 0.000 <0.05 so it can be concluded that there is an effect of finger-holding relaxation techniques on changes in pain scale in post appendicectomy patients in the Dahlia Room of Dr. T. C. Hillers Manumere Hospital.

#### **DISCUSSION**

The finger-grip relaxation technique is a pain management that can help patients control themselves when there is pain or discomfort, physical and emotional stress so that there is a decrease in pain (Potter & Perry, 2006 in Dikson, Toki & Cenona, 2019). Finger grasp relaxation techniques can be used to reduce pain in post appendicectomy clients by involving finger grasping and breath regulation. Each limb has a flow of energy where in the finger grip there is a flow of energy that is perceived as a stimulus to relax. This stimulus activates the transmission of larger and faster A-beta nerve fibers, decreasing pain transmission through smaller diameter C and delta-A fibers, this process inhibits pain stimuli so that patients feel relaxed and relaxed which in turn will lead to a better level of comfort so that pain intensity can decrease (Pinandita et al., 2012 in Aswad, 2020).

Finger hold relaxation technique is a relaxation technique that is very simple and easy to do by anyone related to the flow of energy in the body through the fingers (Pinandita et al., 2012). Each finger area has energy channels or meridians that are directly connected to various organs in the body. The finger grip relaxation technique naturally triggers the endorphin hormone, which is a natural analyseic produced by the body as a pain reliever (Hasaini, 2020).

The time of implementation of the finger hold relaxation technique intervention is carried out 3 times a day for 3 minutes on one finger then alternate with one finger after another, after 15 minutes switch to the other hand interspersed with a short break once (Aswad, 2020; Rasyid, Norma & Samaran, 2019; Dikson, Toki, & Cenona, 2019). Based on research conducted by Andika & Mustafa (2016) in Sulung & Rani (2017) which examines the effect of finger grip

relaxation techniques on reducing the pain intensity of postoperative appendicectomy patients, the results show that there is a difference in pain intensity before and after the finger grip relaxation technique is 1.400 with a standard deviation value of 0.699. The test results in his research obtained a p-value of 0.000 (p <0.05) which means that there is an effect of finger grip relaxation techniques on reducing pain intensity in patients post appendicectomy surgery at Dr. Reksodiwiryo Padang Hospital in 2016. This study is in line with Agustin's research (2012) in Aswad (2020) on the effect of finger-grip relaxation techniques on reducing pain intensity in patients post appendicectomy surgery, that finger-grip relaxation techniques can reduce pain intensity in patients post appendicectomy surgery.

## **CONCLUSION**

There is an effect of finger-grip relaxation techniques to reduce pain intensity in post appendicectomy patients with significant changes in pain intensity, from the five journals reviewed, the p-value result is 0.000 <0.05, which means that finger-grip relaxation techniques can have an effect in reducing pain intensity in post appendicectomy patients.

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