



INFORMATION BRIEF (RAPID REVIEW)

PROSTATE MASSAGE IN CHRONIC PROSTATITIS

Malaysian Health Technology Assessment Section (MaHTAS)
Medical Development Division
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TITLE: PROSTATE MASSAGE IN CHRONIC PROSTATITIS

PURPOSE

To provide brief information on the efficacy/effectiveness, safety and cost-effectiveness of prostate massage in patients with chronic prostatitis based on a request from the Director of Medical Practice Division.

BACKGROUND

Prostate Massage

Prostate massage therapy is the practice of massaging a prostate either for medical or therapeutic reasons. The use of prostate massage therapy is anecdotally supported for a range of conditions such as erectile dysfunction and chronic prostatitis. Prostate massage is thought to help clear the prostate duct that runs between prostate, reproductive and urinary system. The massage may produce a spontaneous secretion of fluid which may clear the duct and helps eliminates any uncomfortable symptoms due to pain ejaculation, erectile dysfunction, urine flow and prostatitis. Prostate massage is not widely accepted by medical community due to uncertainties of evidence. However, some people find relief when they use this treatment option either alone or with another treatment option. Commonly, they may use both prostate massage therapy and antibiotics.¹

Prostate Massage with finger

During a prostate massage, the practitioner will gently press on, or massage, the prostate for several minutes and the prostate secretion will be collected and analysed.

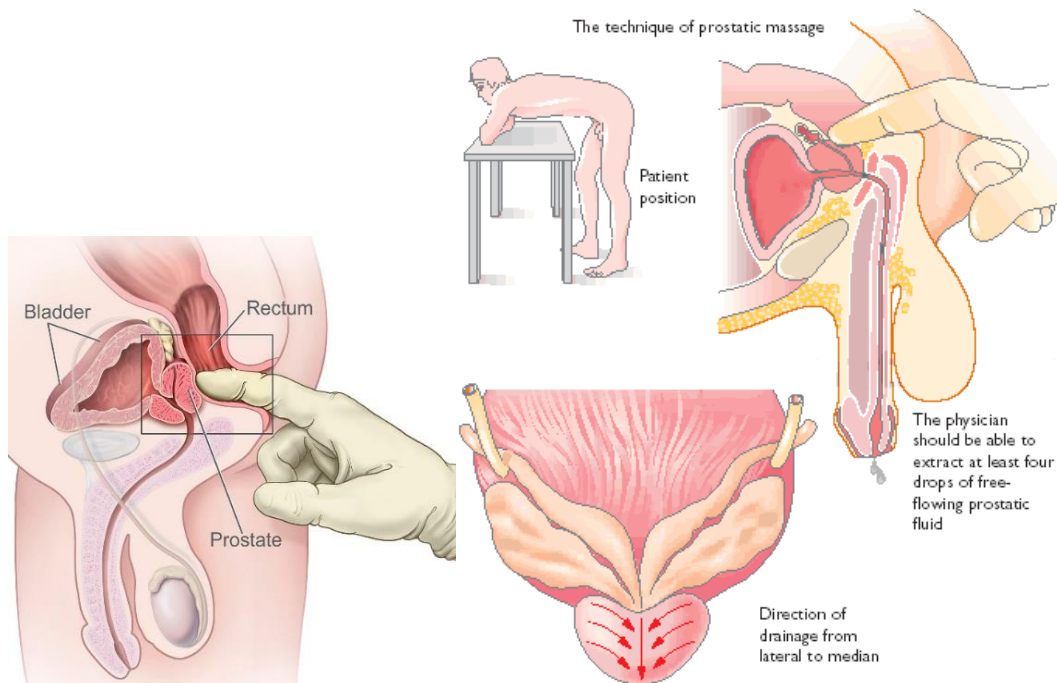


Figure 1: Prostate massage with finger

Prostate Massage Device²

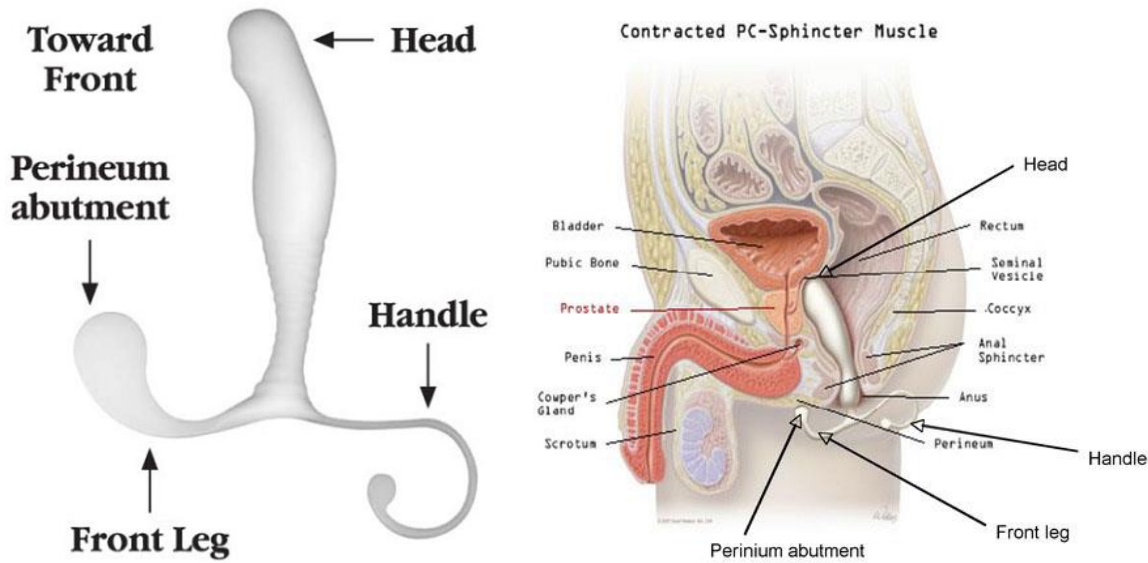


Figure 2: Prostate massage device

Prostatitis

Prostatitis is a disorder of the prostate gland usually associated with inflammation. Prostatitis often causes painful or difficult urination, as well as pain in the groin, pelvic area or genitals. Generally, there are four types of prostatitis; acute bacterial prostatitis, chronic bacterial prostatitis, asymptomatic inflammatory prostatitis and chronic prostatitis.³

Chronic Prostatitis

Chronic prostatitis is an ongoing or recurring pelvic pain and urinary tract symptoms with no evidence of infection. The symptoms vary and depend on the type of disorder including pain or burning sensation during urination (dysuria), difficulty urinating, urgent need to urinate, cloudy urine, blood in urine, pain in the abdomen, groin or lower back, pain in the area between the scrotum and rectum, pain or discomfort of the penis or testicles, painful ejaculation. The cause of chronic prostatitis is not well understood. However, research suggested that it may cause by multiple factors including previous infection, nervous system dysfunction, immune system dysfunction, psychological stress or irregular hormone activity.³

EVIDENCE SUMMARY

From the systematic search eight studies related to prostate massage among chronic prostatitis population were retrieved and included in this information brief. Those studies were published in 1999 to 2009, consisted of two systematic reviews, three control trials, two cross-sectional studies and one pre and post interventional studies. Both SRs^{4,5} and once cross-sectional study⁶ evaluated the efficacy of prostate massage as an adjunct procedure along with antibiotics in chronic prostatitis, the other cross-sectional study⁷ reported on the use of prostate

massage among Chinese urologist and the rest of the included studies reported on the use of prostate massage as an alternative to further investigate the underlying disease related to the prostate and urinary system.

EFFICACY/ EFFECTIVENESS

An SR assessed the effects of non-pharmacological therapies for chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS). The review included 38 studies and only two studies with 115 participants reported on prostate massage. Both studies reported that the efficacy of prostate massage in treating chronic prostatitis was uncertain when compared with control.⁴ Another SR by Mishra VC et. al. specifically examined the evidence for the effectiveness of prostate massage in the treatment of chronic prostatitis. The SR included four studies consisted of one randomised prospective study, two case series and one anecdotal report. The only randomised prospective study was already included in the Cochrane review. Overall the SR reported that prostate massage had a potential role as an adjunct in the management of chronic prostatitis. The prostate massage was performed twice or thrice-weekly for 6-12 weeks alongside with the use of antibiotics that increased possibility of symptomatic relief.⁵

Yang J. et. al. reported in one cross-sectional study involving 656 Chinese urologist regarding their practise towards diagnosing and treating chronic prostatitis. A total of 627 (95.6%) urologist responded towards the questionnaires and it showed that 54.2% Chinese Urologists chose prostate massage as the non-pharmacologic therapy for chronic prostatitis.⁷ Another cross-sectional study by Shoskes DA. et. al. evaluated regular prostate massage in combination with culture specific antibiotic therapy in 72 men with chronic prostatitis. The antibiotics were given in those who were proven with positive culture of prostate secretion and the secretion were examined each time after 1 to 3 times of prostate massage. Overall 29 patients (40%) had complete resolution of symptoms, 14 (19%) had complete resolution followed by a recurrence, 15 (21%) had some improvement and 15 (21%) had no improvement.⁶

Two controlled trials by Tekin A. et. al.⁸ and Ludwig M. et. al.⁹ evaluated the efficacy of prostate massage in asymptomatic and symptomatic patients, respectively. From the post-prostate massage urine, both studies reported that there was statistically significant increase in leukocytes count in subjects with prostatitis than in those without prostatitis ($p < 0.0001$).^{8,9} Another controlled trial by Nickel JC. et. al. compared between sample collected from 2-glass pre- and post- prostate massage (PPMT) and Meares-Stamey 4-Glass Test (MSGT) to detect inflammation and bacteria in men with chronic prostatitis/chronic pelvic pain syndrome. Based on sample analysis, they found that the pre-massage and post-massage test predicted a correct diagnosis in more than 96% subjects which showed a strong concordance with the 4-glass MSGT.¹⁰

One pre- and post-intervention study was conducted by Tarhan F. et. al. evaluated the effects of prostate massage on the serum complexed prostate-specific antigen (cPSA) concentration

in various prostate diseases. The study involved a total of 51 patients with symptoms of lower urinary outflow obstruction. Blood samples of each patient were obtained before and 30 minutes after prostate massage where total PSA (tPSA), free PSA (fPSA) and cPSA levels were measured. A transrectal ultrasound-guided 12-core biopsy of the prostate was performed in 26 patients who had serum tPSA levels greater than 2.5 ng/mL and/or with abnormal digital rectal examination findings. Compared with before the prostate massage, the tPSA and fPSA levels as well as fPSA/tPSA ratio increased significantly ($p < 0.0001$) and the increase in cPSA was minimal but statistically significant ($p = 0.047$). In patients with prostate cancer, no significant increase in the mean forms of PSA (tPSA, cPSA, and fPSA/tPSA ratio) reported, except for fPSA, after the prostate massage. However, a greater increase in all PSA forms were observed in the chronic prostatitis group.¹¹

SAFETY

No safety issue regarding prostate massage were reported in the included studies. However, those who are performing prostate massage therapy require a formal training to avoid any serious harm to the reproductive system. Massaging the prostate too vigorously or with too much pressure could worsen the symptoms or may cause other health problem.¹

COST-EFFECTIVENESS (If any)

No study retrieved regarding the cost of prostate massage. However, from local commercial website the price of prostate massage in Malaysia starts from RM50.¹²

CONCLUSION

Based on the retrievable scientific evidence, the efficacy of prostate massage as a treatment procedure in chronic prostatitis was inconclusive. Low level evidence showed the adjunct used along with antibiotic may improve the symptoms. The prostate massage has been used as an alternative way to collect specimen to diagnose the cause of symptomatic or asymptomatic prostatitis. However, the practice should be conducted by a well-trained healthcare staff.

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