



e-Newsletter

Men's Health

Healthy
Men's

2023
Issue 6th

Summer 2023



Issue 6th e-Newsletter Theme Men's Health

CONTENTS

Effects of Low-intensity Extracorporeal Shockwave
Therapy on Erectile Dysfunction:
A Systematic Review and Meta-analysis

1

Protect Your Manhood.
Protect Your Knee.

2

- EBP Activities**
- 2023 Journal Club
 - 2023 TKOH EBP Workshop

3

Published by:
Nurse Services Development
& Evidence-based Practices
Subcommittee

Editor Team:
Mr Lee Siu Pui Perry
Dr Lucia Li
Ms Alvina Lee
Ms Simmy Sin
Ms Ka Wai Lam

Subcommittee Advisor:
Ms Mandy Kwok, GMN
Mr Jan Ching, NC (Uro)



GMN's Message

It is my pleasure to introduce this e-newsletter, which focusses on the importance of evidence-based practice (EBP) in promoting men's health. As we know, men's health is a critical issue that affects not only men themselves, but also their companions and families.

EBP is an approach to healthcare that emphasizes the use of best available evidence to guide clinical decision-making. In the context of men's health, EBP is vital in developing effective strategies to address the unique health needs and challenges faced by men. Our newsletter features articles that highlighted the latest research and evidence-based treatment of Erectile Dysfunction and Anterior Cruciate Ligament (ACL) Injury, provides practical tips and advice for men to take charge of their own health and well-being. I hope that the information will serve as a valuable resource for our nurses or any other healthcare professionals who are involved in promoting men's health, and highly appreciated the input from our Nursing Services Development and Evidence-based Practice Subcommittee to prepare this e-newsletter.

Men's Health

MEN, 2 HEALTH

In the past, the concept of masculinity in Chinese was linked to physical strength and courage, which emphasized the power of male character over emotional expression. Men tends to ignore their psychological needs.

Nevertheless, the form of manhood has continuously changed and drawn influence from foreign cultures over time. Nowadays, we concern not only physical health but also psychological well-being.

In this 6th issue of EPB e-newsletter, we invited Mr. Jan CHING (NC, Urology) and Mr. Wilson WONG (ANC, O&T) to share with us their expertise in male related health issues from nursing perspective. We are glad to have this opportunity to refresh and update our knowledge related to the treatment of erectile dysfunction (ED) and anterior cruciate ligament (ACL) injury.

EBP Editor's Note



Effects of Low-intensity Extracorporeal Shockwave Therapy on Erectile Dysfunction: A Systematic Review and Meta-analysis

Mr Jan Ching, NC (Urology)

Foreword

Talking about men's health, erectile dysfunction (ED) can be a frustrating condition, but men often feel ashamed or uncomfortable discussing it. However, ED is not only a physical health issue of men, but also causing psychological issue and even causing relationship problem with partner.

Introduction

ED is a condition that affects the sexual health of men and can cause difficulty in achieving or maintaining an erection sufficient for sexual intercourse. It is a common condition that can potentially affect an individual's relationship with their partner or others, causing stress, tension, and frustration. According to a study conducted in 2016 by Lee et al. on the prevalence of erectile dysfunction in Hong Kong, the overall prevalence of ED in men aged 18-70 was 31.2%, with a prevalence of 54.7% in men aged 60-70.

[Click the title to read the full text](#)

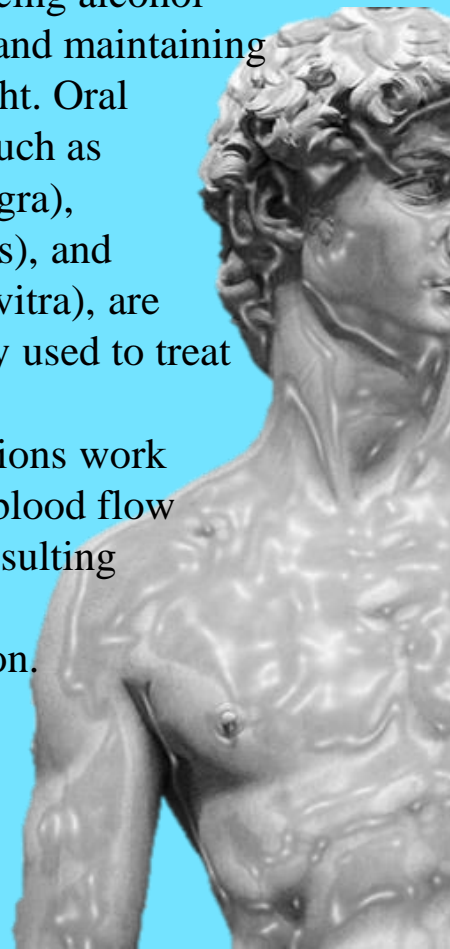


What is Shockwave Therapy?

Low Intensity Shockwave Therapy (LiSWT) is a non-invasive and non-surgical treatment that helps to improve blood flow in the penis for overall better erection strength and quality.

Regarding conventional treatments for ED, the first-line treatment usually involves lifestyle modifications, such as quitting smoking, reducing alcohol consumption, and maintaining a healthy weight. Oral medications, such as sildenafil (Viagra), tadalafil (Cialis), and vardenafil (Levitra), are also commonly used to treat ED.

These medications work by increasing blood flow to the penis, resulting in improved erectile function.



Vacuum devices, penile injections, urethral suppositories, and surgery are also options for treating ED, depending on the underlying cause, severity of symptoms, and individual preferences and needs. Penile implants or vascular surgery to improve blood flow to the penis may be recommended in some cases. Extracorporeal Shock Wave Therapy (ESWT) is a non-invasive medical treatment that uses high-intensity sound waves to promote healing in the body. It is used to treat muscle skeletal conditions commonly but also erectile dysfunction at a low intensity level.

This stimulates the body's natural healing response and promotes the formation of new blood vessels and tissue regeneration. In this article, it will explore the effectiveness of low-intensity extracorporeal shockwave therapy (LI-ESWT) as a treatment option for ED.

Method:

The authors conducted a systematic review and meta-analysis of randomized controlled trials (RCTs) investigating the use of low-intensity extracorporeal shockwave therapy (Li-ESWT) for the treatment of erectile dysfunction (ED).

The authors searched several major electronic databases, including PubMed, Embase, and the Cochrane Library, for relevant studies published up to November 2020. This review included RCTs that met their predefined inclusion criteria, which included studies that used validated outcome measures for ED, had a follow-up period of at least 4 weeks, and provided sufficient information on the use of Li-ESWT.

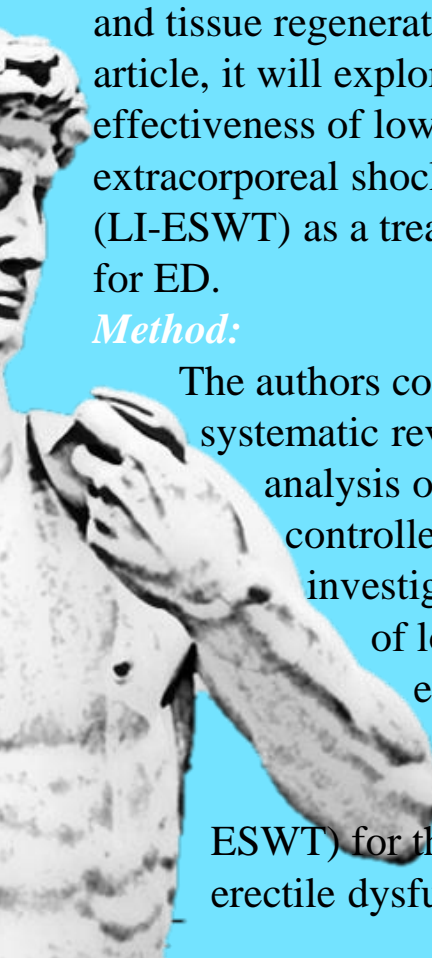
The authors excluded studies that used high-intensity shockwave therapy, low-intensity pulsed ultrasound therapy, or other treatments for ED.

The authors performed a meta-analysis using a random-effects model to assess the overall effect size of Li-ESWT on ED outcomes. They also performed subgroup analyses to explore potential sources of heterogeneity in the data, such as the type of Li-ESWT device used, the treatment protocol, and the duration of treatment.

Result:

The authors identified 21 RCTs with a total of 1636 participants that met their inclusion criteria.

The pooled effect size showed a significant improvement in erectile function outcomes among those who received Li-ESWT compared to those who received a placebo or no treatment



(standardized mean difference [SMD] 0.95, 95% confidence interval [CI] 0.62 to 1.28, $p < 0.001$). The heterogeneity among the studies was moderate to high ($I^2 = 68.6\%$).

The authors performed subgroup analyses to explore potential sources of heterogeneity. They found that Li-ESWT appeared to be effective regardless of the type of device used, the treatment protocol, or the duration of treatment. However, the authors noted that the optimal treatment parameters for Li-ESWT remain unclear.

The authors also assessed the quality of the included studies using the Cochrane risk of bias tool. **They found that the overall risk of bias was moderate, with some studies showing high risk of bias in certain domains, such as blinding of participants and personnel.**

Overall, the authors concluded that Li-ESWT appears to be an effective treatment option for ED in the short term, but further research is needed to establish its long-term efficacy and safety, and to determine the optimal treatment parameters.

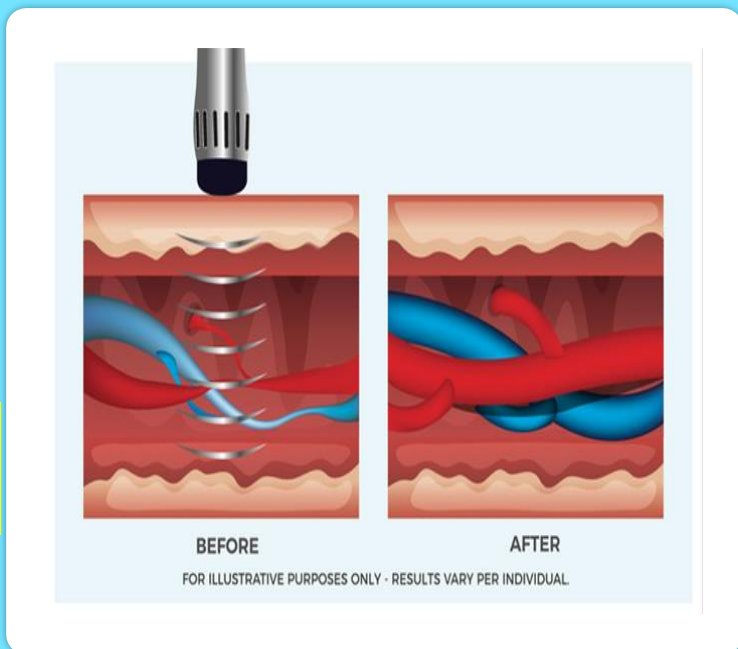
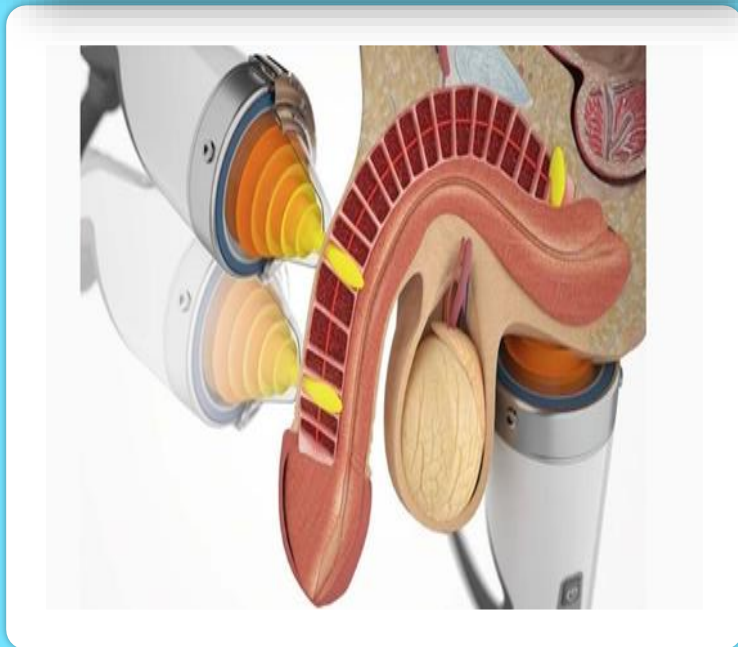
Critique:

Based on the Johns Hopkins model, this study "Effects of Low-Intensity Extracorporeal Shockwave Therapy on Erectile Dysfunction: A Systematic Review and Meta-Analysis" by Liu, Pu, and Li would be considered a Level IIB evidence. This is because the meta-analysis is based on randomized controlled trials (RCTs) that have moderate risk of bias. The authors acknowledged that there were variations in the quality of the studies included in their analysis and that the optimal treatment parameters for Li-ESWT remain unclear. These limitations suggest that the evidence provided by this study is not as strong as a Level IIA study, which would require RCTs with low risk of bias and consistent findings across the studies.



Comment:

Overall, the article provides a thorough and well-structured analysis of the available evidence on the use of Li-ESWT for ED. The authors used appropriate statistical methods to explore potential sources of heterogeneity and assessed the quality of the included studies. The findings suggest that Li-ESWT may be a promising treatment option for ED. However, there are some limitations to the article, such as the variation in the quality of the included studies and the need for longer-term follow-up studies to determine the durability of the treatment effects. Additionally, the authors note that the optimal treatment parameters for Li-ESWT are unclear, which may limit the generalizability of their findings. Further research is needed to establish the long-term efficacy and safety of Li-ESWT.



Further Reading:

[Shockwave Treatment of Erectile Dysfunction](#)



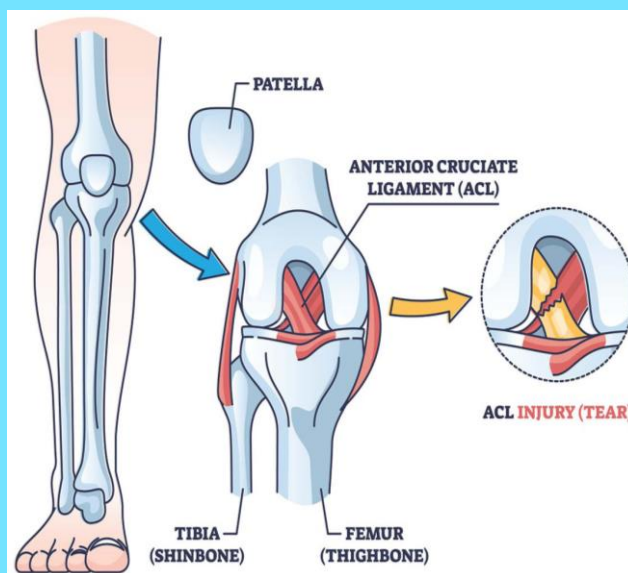
Protect Your Manhood Protect Your Knee



Mr Wong King Sum, ANC (O&T)

Anterior cruciate ligament (ACL) injury is common among men who play sports that involve sudden changes of direction, such as soccer or basketball. It can occur when the knee is twisted, bent, or hyperextended beyond its normal range of motion. Some common causes of ACL injury are landing awkwardly from a jump, changing direction rapidly, stopping suddenly, or colliding with another person or object.

In Hong Kong, according to a study by Fok and Yau (2015), ACL injury is a common knee injury, affecting 17.2 per 100,000 population per year. **The majority of ACL injuries in Hong Kong are sports-related (82.4%).** Also, it is more prevalent among males (83.9%) and young adults (mean age 29.4 years). **The rate of ACL reconstruction (ACLR) surgery in Hong Kong is low compared to other countries, with only 36.8% of patients undergoing surgery within one year of injury.** The main reasons for not undergoing surgery are lack of awareness, fear of complications, cost and long waiting time.



After the season-ender knee pop, most young and active patients who want to return to sports would consider ACLR. It aims for restoring the function and stability of the knee after an ACL injury and ultimately want to resume their sports or daily activities without pain or instability. In elite game plays, we could sometimes hear news of recovery after ACLR and returned to field. Virgil van Dijk, the Liverpool defender, who suffered an ACL injury against Everton in October 2020. He returned to field 9 months after injury.



Another NBA player Klay Thompson, the Golden State Warriors guard, who tore his ACL in June 2019 and taken 8 months to recover, and he was able to return to game in January 2022. However, those fantasy of elite player could not be generalized to the quality of life (QOL) of ordinary patients after ACLR. According to Filbay et al. (2017), only 39% of participants returned to competitive sport, 28% returned to a lower level, and 32% did not return to sport after ACLR.

The journal article by Filbay et al. (2017) aimed to describe the impact of returning to sport after ACLR on QOL and psychological health outcomes. The authors conducted a cross-sectional study with 162 participants who had knee difficulties 5-20 years after ACLR. They found that not returning to sport after ACLR was associated with worse QOL and more depressive symptoms, and that other factors such as body mass index, subsequent knee surgery, and contralateral ACLR also influenced QOL outcomes. The article provides insights into the long-term consequences of ACLR and the importance of promoting return to sport for people with knee difficulties.

The article has several strengths, such as using a large and diverse sample of participants with different levels of sport participation, using reliable and valid outcome measures (KOOS, AQoL-8D, ACLQOL, WALs and HADS), and adjusting for potential confounders such as pain and time since surgery.

The article also has some limitations, such as the cross-sectional design that limits causal inference, the lack of a control group of healthy individuals or individuals with ACL injury who did not undergo surgery, and the potential recall bias of self-reported data. Apart from providing insights into the long-term consequences of ACLR and the role of sport participation in QOL and psychological health. It also has implications for clinical practice, such as encouraging patients to return to sport after ACLR, providing psychological support during rehabilitation, and monitoring for signs of depression or poor QOL. It also suggests directions for future research, such as exploring the mechanisms underlying the association between sport participation and QOL,

examining the effects of different types of sport or physical activity on QOL and psychological health and conducting longitudinal studies to track changes in QOL and psychological health over time after ACLR.

Nevertheless, we have a multidisciplinary sports rehab team at TKOH that provides holistic care for patients with ACL injury after surgery. Since we implemented a protocol-driven ACL rehab protocol in 2019, more than 70% of our patients have returned to sports after ACLR. This is an encouraging result compared to the study by Filbay et al. (2017). We are eager to know their long-term QoL beyond 5 years after ACLR.

Lastly, to keep your active manhood, prevention is better than cure. I want to share with you the following tips to minimize the risk of ACL injury.

6 Ways to Prevent ACL Injury

- **Warm up properly before physical activity**
- **Strengthen your leg muscles, especially the hamstrings**
- **Improve your balance and agility with exercises like hopping and skipping**
- **Avoid sudden changes of direction or speed**
- **Land softly and correctly after jumping, with your knees bent and aligned with your feet**
- **Wear appropriate footwear and protective gear for your sport**

(Arundale et al., 2022 & Mayo Clinic Health System, 2018)

References:

Arundale AJH, Silvers-Granelli HJ, Myklebust G. ACL injury prevention: Where have we come from and where are we going? *J Orthop Res*, 40(1):43-54.

Filbay, S. R., Ackerman, I. N., Russell, T. G., & Crossley, K. M. (2017). Return to sport matters—longer-term quality of life after ACL reconstruction in people with knee difficulties. *Scandinavian Journal of Medicine & Science in Sports*, 27(5), 514–524.

Fok, A. W. M., & Yau, W. P. (2015). Anterior cruciate ligament tear in Hong Kong Chinese patients. *Hong Kong Medical Journal*, 21(2), 131–135.

Mayo Clinic Health System (2018). How to prevent an ACL injury. <https://www.mayoclinichealthsystem.org/hometown-health/speaking-of-health/how-to-prevent-an-acl-injury>

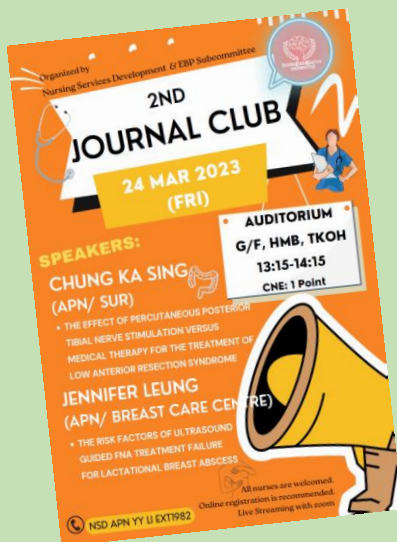
EBP Activities



Your feedback is extremely valuable to us. Please scan QR code or click EBP icon to provide your evaluation!

2023 Journal Club

Click the title to read the full text



2023 TKOH EBP Workshop

