

Original Research

Role of Physical Therapy in Cystocele Repair and Diagnosis by Radiography in Tobruk, Libya

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ABSTRACT:

Cystocele a medical condition that occurs in women more than men due to pregnancy and muscle weakness in women, as the bladder begins to tilt backwards and press on the front wall of the vagina. In this study, we investigate the possibility of repairing a cystocele with physical therapy without resorting to surgery. A 75-year-old case was found in a private medical clinic in the city of Tobruk suffering from cystocele grade II. She was diagnosed with ultrasound and was referred to the surgeon. The patient was referred to physical therapy to try cystocele repair before surgical intervention, where a physical therapy program was conducted for the patient for a month. The patient was followed up with her doctor after



physical therapy, he found that the condition had completely recovered and no longer required surgical intervention. We conclude from this study that physical therapy can help recover such cases without the need for surgical intervention. The role of physiotherapy is important for daily resumption of activity and full recovery. Radiography plays an important role to diagnosis. Further studies are required to confirm these findings.

KEYWORDS: Cystocele, Physical Therapy, Radiographic, Tobruk, Libya.

INTRODUCTION

Cystocele a medical condition that occurs in women more than men due to pregnancy and muscle weakness in women, as the bladder begins to tilt backwards and press on the front wall of the vagina (Bomego-Jimenez, *at el.* 2020).

The female reproductive system gets stuck between the urinary and intestinal systems. When the vaginal muscles and fascia, which are tissues whose role is to maintain the bladder's natural position, reach a point where they are unable to maintain the bladder in its place, they begin to bend backwards, pushing the front wall of the vagina in their path (Hamid, R., *at el.* 2014).

Cystocele is a common condition that affects women over the age of 50. The treatment options for cystocele depend on the severity of the condition and whether urinary incontinence is present. For grades 1-2, pelvic floor physiotherapy is often recommended as a therapeutic option. In more severe cases, grades 3-4, corrective surgery may be considered (Borrego-Jimenez, *at el.* 2020).

The pelvic floor is composed of a group of dome-shaped muscles and fascia that surround the urethra, vagina, and anus. It plays a vital role in various functions within our body (Rossetti, S. R. 2016). By coordinating with the nervous system, ligaments, and fascia, as well as contracting and relaxing appropriately, the pelvic floor muscles maintain the stability of internal organs and contribute to continence, urination. It is worth noting that pelvic prolapse, including cystocele, is observed in approximately 40-60% of women who have

given birth. These types of injuries are more common in women who have experienced childbirth compared to those who haven't (Hoyte, L., *at el.* 2016).

Most common symptoms a vaginal bulge, the feeling that something is falling out of the vagina, the sensation of pelvic heaviness or fullness, frequent or urgent urination, frequent urinary tract infections, back and pelvic pain, fatigue, painful sexual intercourse, bleeding, A bladder that has dropped from its normal position and into the vagina can cause some forms of incontinence and incomplete emptying of the bladder (DeWit-Stromberg, *at el.* 2016).

Diagnosis by radiography X-rays: The simplest way to see , X-rays provide the easiest, quickest, and cheapest option. The X-ray is at least going to be a direct (Souliman, S. I., et al .2022).

Treatment by physical therapy Pelvic floor muscle therapy – Pelvic floor exercises to strengthen vaginal support can be of benefit. Specialized physical therapy can be prescribed to help strengthen the pelvic floor muscles (DeWit, S. C., *at el.* 2016).

Kegel's exercises significantly effective for management of back pain in patients with Grade I and II Cystocele (Naqaish, T., *at el.* 2013).

Physical therapy exercises and other forms of rehabilitation to help reduce low back pain and recover in short time. physical therapy play important role (Souliman, S. I., *et al.* 2022).

Aim of this study investigate the possibility of repairing a cystocele with physical therapy without resorting to surgery.

MATERIALS AND METHODS

In this study, we investigate the possibility of repairing a cystocele with physical therapy

without resorting to surgery. A 75-year-old case was found in a private medical clinic in the city of Tobruk suffering from cystocele grade II. She was diagnosed with ultrasound as shown in (fig 1) then was referred to the surgeon.

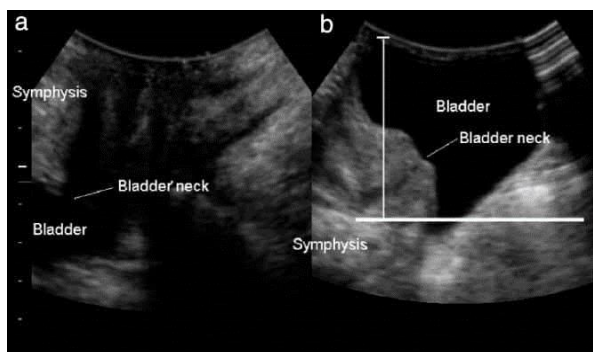


Figure: (1). cystocele ultrasound.

The patient was referred to physical therapy to try cystocele repair before surgical intervention, where a physical therapy program was conducted for the patient for a month. Symptoms: Back pain, urgent urination and fatigue.

Treatment physical therapy: Massage lower back for 14 minutes, Active exercise by the patient and little assist by physiotherapist (flexion and extension for hip, knee joint and ankle to strengthen whole muscles of the thigh, leg, back and abdominal).

Exercises Strengthen Muscles by Resistance using Theraband and Weights

Bridging Kegel's exercises (being defined as a program of repeated voluntary pelvic floor muscle contractions taught and supervised by a physiotherapist) the bottom of the pelvis; to support the uterus, bladder, and rectum, vagina.

RESULTS AND DISCUSSION

In this study, we investigate the possibility of
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repairing a cystocele with physical therapy without resorting to surgery. A 75-year-old case was found in a private medical clinic in the city of Tobruk suffering from cystocele grade II. She was diagnosed with ultrasound and X-ray.

The patient over the age of fifty who have experienced childbirth are at a higher risk for developing cystocele.

Physical therapy play important role to treat and return patient to daily activity, Kegel exercises have played a significant role in strengthening the pelvic and back muscles and reduce back pain. Radiographic is very important to diagnosis in this case have used X-ray and ultrasound.

Baggish, *at el.* (2020) Cystocele a medical condition that occurs in women more than men especially over than 50 years old (Baggish, *at el.* 2020). agree with our study whereas the patient over than 50.

Borrego-Jimenez, *at el.* (2020).The treatment options for cystocele depend on the severity of the condition and whether or not urinary incontinence is present. For grades 1-2, pelvic floor physiotherapy is often recommended as a therapeutic option. (Borrego-Jimenez, *at el.* 2020) this agreement with this study whereas physiotherapy has been effective in treating this patient with cystocele grade 1.

Hoyte, L., *at el.* (2016).These types of injuries are more common in women who have experienced childbirth compared to those who haven't (Hoyte, *at el.* 2016). This agreement with this study.

DeWit, S. C., *et al.* (2016). Most common symptoms a vaginal bulge, the feeling that something is falling out of the vagina, the sensation of pelvic heaviness or fullness, \ urgent urination, back and pelvic pain, fatigue, painful sexual intercourse, bleeding,. of the

bladder (DeWit, *at el.* 2016). Same symptoms in this case (Back pain, urgent urination and fatigue).

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Souliman¹, S., *et al.* (2019) Physical therapy exercises and other forms of rehabilitation to help reduce low back pain and recover in short time (Souliman¹, S., *et al.* (2019). This agreement with this study.

Naqaish, T., *at el.* (2013) Kegel's exercises significantly effective for management of back pain in patients with Grade I and II Cystocele (Naqaish, T., *at el.* 2013). In our study Kegel's exercises was very effective.

CONCLUSION

We conclude from our study on cystcele where it was noted that most common in women over than 50 years old who have experienced childbirth.

Through this study, we recommend maintaining exercising and avoiding all wrong practices that may lead to fall or overthr cystcele like bearing heavy weights suddenly. Physiotherapy played an important role in recovering patients, Physiotherapy can help to treat cystcele Grade II and can reduce back pain by kegal exercise

Radiographic is imprtant and Easier and cheaper to diagnosis . Further studies are required to confirm these findings.

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ETHICS

We have ethical approval from the research studies office of Tobruk University.

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الجراحي، حيث تم تطبيق برنامج علاج طبيعي لمدة شهر. بعد انتهاء العلاج الطبيعي، تابعت المريضة حالتها مع طبيبها، الذي وجد أن حالتها قد تحسنت تمامًا ولم تعد بحاجة إلى جراحة. نستنتج من هذه الدراسة أن العلاج الطبيعي يمكن أن يساعد في علاج مثل هذه الحالات دون الحاجة إلى جراحة. يُعد دور العلاج الطبيعي مهمًا لاستئناف النشاط اليومي والتعافي التام. يلعب التصوير الشعاعي دورًا هامًا في التشخيص. هناك حاجة إلى مزيد من الدراسات لتأكيد هذه النتائج.

الكلمات المفتاحية: تدلي المثانة، العلاج الطبيعي، التصوير الشعاعي، طبرق، ليبيا.

الملخص

التدلي المثاني حالة طبية شائعة لدى النساء أكثر من الرجال، نتيجة الحمل وضعف عضلات الحوض، حيث تبدأ المثانة بالانحناء للخلف والضغط على جدار المهبل الأمامي. في هذه الدراسة، بحثنا إمكانية علاج التدلي المثاني بالعلاج الطبيعي دون اللجوء إلى الجراحة. تم تشخيص حالة سيدة تبلغ من العمر 75 عامًا في عيادة طبية خاصة بمدينة طبرق، تعاني من تدلي مثاني من الدرجة الثانية. تم تشخيصها بالموجات فوق الصوتية، ثم أُحيلت إلى جراح. خضعت المريضة للعلاج الطبيعي ك محاولة لإصلاح التدلي المثاني قبل التدخل

