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Fat Wallet Syndrome: An Epidemic among Men

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ABSTRACT

Men do not carry a handbag to keep the money, so they keep a wallet in their trousers back pocket which over a period of time commonly gives rise to a condition termed as "fat wallet syndrome". This condition leads to compression of sciatic nerve and involvement of the piriformis muscle. The primary objective to write this article is to discuss the ill effects, create awareness and prevention towards the occurrence of fat wallet syndrome as this condition puts an impact on individual's mental, social and economic wellbeing.

Keywords: Fat wallet syndrome, Visual analog scale, Piriformis muscle, Stretching, Posture training, Deep breathing exercises

INTRODUCTION

In today's world, money is an important aspect of life. Carrying large sum of money in the form of currency notes and coins is difficult, so human started carrying credit cards called as Plastic money as a source of money while traveling wherever possible all over the world. As plastic money became more easily assessable to the common man came with a new epidemic among men termed as "fat wallet syndrome", due to carrying large thick wallet in their back trousers pocket with number of cards, papers, bills and/or coins in the wallet of their dominant side while driving, riding and sitting. In other words, Fat Wallet Syndrome is a condition in which the sciatic nerve gets compressed along with the spasm of the piriformis muscle. This in return leads to greater posterior pelvic tilt, scoliosis (lateral bending), and kyphosis (thoracic flexion).

As symptoms, a patient feels pain radiating to the hip and back, numbness in the foot, leg and ankle (on the same side of compression due to keeping the fat wallet) and pain on lying (especially supine).

Synonyms of Fat Wallet Syndrome

Wallet sciatica, piriformis syndrome, pelvic outlet syndrome, wallet neuropathy, wallet neuritis, credit carditis and hip pocket syndrome (Table 1) [1].

Table 1 The signs and symptoms associated with fat wallet syndrome

Sign	Symptoms
Piriformis sign positive	Pain or/and paresthesia from sacrum through the gluteal region to the posterior aspect of the thigh which stops above the knee.
Tenderness present in the region of the sacroiliac joint and greater sciatic notch.	Pain on standing, sitting and/or lying for 15 to 20 minutes or more.
Tenderness present over piriformis muscle	A headache and pain felt in the neck, abdominal, inguinal and pelvic region.
Pace sigh (flexion, adduction and internal rotation test) positive.	Pain in the contra lateral sacroiliac joint
A palpable mass in the ipsilateral buttock.	Numbness in the foot and difficulty in walking

Origin of Fat Wallet Syndrome

This condition became a common trend in the 1990's, as it was first described by a researcher in New England Journal of Medicine in the year 1966 as credit cards were introduced for the first time [2].

Clinical Presentations [3]

While considering a patient with fat wallet syndrome, a thorough and precise assessment should be performed for an effective and optimum treatment plan.

Assessment of a Patient with Fat Wallet Syndrome

The major steps should include the patient's chief complaint, medical history (present and past), assessment of pain, objective evaluation, physical examination, and radiological imaging.

Chief complaint: The examiner should let the patient express his discomfort and distress in his convenient mode of language.

Medical history: The patient's history of present and past illness along with history from adolescence as it is this phase of life from where men usually start keeping a fat wallet in their trousers back pocket while driving and riding.

Assessment of pain: Although assessment for pain should be carried out while taking care of onset, site, side, duration, 24 hours pattern, positional factors, aggravating and relieving factors. Pain rating scales (visual analog scale, a numerical scale, valid pain questionnaire) can be used regularly from Day 1 till the completion of treatment to check the efficacy of the treatment.

Objective evaluation: This should include evaluation of posture (standing, walking and sitting), deformities (scoliosis, kyphosis, and hyperlordosis), and gait (walking pattern, step length, stride length, and cadence).

Physical examination: This part being of great importance should be performed to assess the patient's range of movements (active range of movements and passive range of movements) should be done within the available and pain-free range without causing further damage to the sciatic nerve or/and piriformis muscle. Assessment of muscle strength should be performed according to the Oxford classification (Table 2).

Table 2 Oxford classification for assessment of muscle strength

Grade	Action
0	No contraction at all
1	The only flicker of contraction but the movement of the joint does not occur
2	Movement is possible only with the gravity counterbalanced
3	Movement is possible against gravity
4	Movement is possible against resistance
5	Normal functional movement occurs

Radiological Imaging: X-rays technique which is easily available (clinics, dispensaries, and hospitals) should be used to identify the degree of scoliosis and pelvic tilting. Diagnostic ultrasound can be used to check the compression on internal abdominal or/and pelvic organs due to pelvic rotations, scoliosis, and thoracic kyphosis.

Treatment for Fat Wallet Syndrome

The treatment can be majorly classified into medical, surgery and physiotherapy/physical therapy protocols.

Medical: Pharmacological agents (non-steroidal anti-inflammatory drugs and acetaminophen) and muscle relaxant to reduce the spasm in piriformis muscle are prescribed to patients. Sclerotherapy/prolotherapy which comprises of injecting an irritating solution at the origin and insertion of the ligaments to build up the damaged connective tissue [4,5].

Surgery: A surgery is recommended if the pharmacological treatment fails to deliver the desired results or the decompression of sciatic nerve is the treatment of choice in case of the advanced stage of fat wallet syndrome. The basic aim of surgery is to release any pressure being exerted over the sciatic nerve which results in the reduction of pain, numbness and tingling sensation.

Physiotherapy/physical therapy: Postural training should be done by a trained physical therapist by making use of

visual feedback method for correction and training for good postures in standing and sitting patterns. Patients should be taught straight wall standing wherein the patient stands with his heels, buttocks, scapula in adduction and occiput touching the wall and maintaining this erect posture for a certain duration, which is increased gradually. If the severity of scoliosis and kyphosis can be corrected without surgery, orthosis can be prescribed to the patient which he should wear during the day (workplace, malls, traveling etc) with takeoff benefits while stretching and strengthening exercise and again wearing after treatment sessions but removed at night. The prescribed orthosis should be worn until the spine appears back to normal.

Stretching should be done for 2 to 3 hours in a day in intervals keeping in mind with patient's tolerance levels. The piriformis muscle should be stretched manually by applying pressure perpendicular to the long axis of the piriformis muscle and parallel to that of buttocks. The hamstrings should also be stretched to relax which will help in reducing pain in the muscle. The pectoralis major (upper, middle and lower) fibers and latissmus dorsi should be stretched to reduce tightness due to thoracic kyphosis which is commonly seen in advanced stages of this condition. Cryotherapy will be beneficial patients if the pain starts during stretching or after completion of the stretching session [6].

Strengthening should be performed for majorly the hip adductors, extensors, and external rotators wherein the treatment protocol consist of 3 phases: no weight-bearing exercise, weight-bearing exercises, and ballistic exercise. In addition to these dynamic exercises and ballistic exercises should be performed which consist of plyometrics [6].

Deep breathing exercise should be incorporated to increase chest expansion which is a major issue of concern in patients with advanced stages of fat wallet syndrome. Chest measurement should be used as a parameter to evaluate the efficacy of deep breathing exercises and stretching of pectoralis muscles.

CONCLUSION

From the present study, it can be concluded that men should be encouraged to stop keeping the wallet in their back pocket when sitting, driving and riding, and must be encouraged to keep the wallet in the front pocket while they sit, drive and/or ride. As a preventive measure the general population must be educated and advised not to keep unnecessary documents, bills, photographs, not frequently used credit cards and coins in their wallet. Men should be advised to maintain a healthy lifestyle with appropriate stretching, strengthening exercises of the major muscles of the body and deep breathing exercises.

DECLARATIONS

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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