



ORIGINAL RESEARCH ARTICLE

## Harmful effects of tight pants or jeans on health

Dar pantolon veya kot giyinme ve sağlığa zararlı etkileri

Gül Yücesan<sup>1</sup>, MD, Rabiye Yılmaz<sup>1</sup>, MD, Şule Selman<sup>2</sup>, MD

*1*Bezmialem Vakıf University, Faculty of Medicine, Department of Obstetrics and Gynecology

*2*Biruni University, Faculty of Medicine, Department of Obstetrics and Gynecology

### ÖZET

**AMAÇ:** Günümüzde yaygın olarak moda olan dar pantolon giyilmektedir. Dar pantolonların rahatsız bir kıyafet olması sebebi ile pek çok yan etki ve şikayete neden olmaktadır.

**YÖNTEMLER:** Bu retrospektif çalışmada, 44 kadın araştırıldı. 1. gruptaki yirmi dört kadın, en az 5 yıl boyunca dar pantolon giymişti ve ikinci gruptaki 20 kadın, en az 5 yıl boyunca gevşek pantolon veya etek giymişti.

**BULGULAR:** Çalışmada, grup 1'deki kadınların % 50'sinde diz ağrısı, % 62.5'inde vajinal enfeksiyon vardı. Kontrol grubunda diz ağrısı ve vajinal enfeksiyon oranları sırasıyla% 5 ve% 25 idi.

**TARTIŞMA:** Çalışmada, kadınların% 50'sinde diz ağrısı,% 62.5'inde vajinal enfeksiyon vardı. Literatürde bu konuda yapılmış çalışmalar yetersiz olduğundan bu sonuçlar önemlidir.

**SONUÇ:** Bu çalışmada dar pantolonun baş ve diz ağrısı, cilt reaksiyonları, bacak kaslarında güçsüzlük, vajinal enfeksiyon gibi ciddi semptom ve komplikasyonlara neden olabileceği gösterilmiştir. Bu konuda daha fazla çalışma yapılmalı ve toplum fertleri bu konuda bilinçlendirilmelidir.

**ANAHTAR KELİMELER:** Dar pantolon ve kotlar, dar pantolon ve enfeksiyon, dar kıyafet ve zararları

### ABSTRACT

**BACKGROUND:** Nowadays, it is worn in narrow pants which are widely used in fashion.

Narrow pants are an uncomfortable outfit which causes many side effects and complaints.

**METHODS:** In this retrospective study, 44 women were researched. Twenty-four women in group 1 wore tight trousers for at least 5 years, and 20 women in group 2 wore loose trousers or skirts for at least 5 years.

**RESULTS:** In the study, 50% of the women in group 1 had knee pain and 62.5% had vaginal infections. In the control group, knee pain and vaginal infection rates were 5% and 25%, respectively. In addition, 25% of the skin reactions were found in Group 1, whereas only 5% were found in the control group.

**DISCUSSION:** In the study, 50% of the women in group 1 had knee pain and 62.5% had vaginal infections. Although the weakness in the leg muscles is lower and it is 8.3%, this is a serious complication

**CONCLUSION:** In this study, it has been shown that narrow trousers may cause serious symptoms and complications such as head and knee pain, skin reactions, weakness in leg muscles, vaginal infection. More work needs to be done in this regard and community members should be made aware of this issue.

**KEYWORDS:** Narrow pants and jeans, tight trousers and infections, tight clothing and damage

### Corresponding author

Gül Yücesan. Bezmialem Vakıf University, Faculty of Medicine, Department of Obstetrics and Gynecology

e-mail: [gyucesan@bezmialem.edu.tr](mailto:gyucesan@bezmialem.edu.tr)

**Conflict of Interest:** There is no Conflict of Interest in this study

**Ethical Approval:** There is no need to ethical approval because It is a retrospective study

**Funding:** There is no funding

## INTRODUCTION

Nowadays wearing to narrow pants in widespread because fashion. Clothing of tight pants are cause a lot of side effects and complaints with the reason that the uncomfortable. Sometimes it has been reported that serious infections, muscle weakness, osteoporosis are causing irreversible serious problems (1).

The wearing tight dresses and waist belt and narrow wearing could be contribute to muscle, digestive problems, bowel and urinary discomfort (2).

Tight wearing or waist belt obliges the abdominal muscles to work together differently. Sit-to-stand (STS) is the most frequent movement of sedentary workers (3).

When STS is damaged by wrong using to human musculoskeletal system, repetitive movement of STS might contribute to musculoskeletal dysfunction (4, 5). In one study showed to anterior tilt of the pelvic angle differed significantly during the STS maneuver with the tightness of the waist belt ( $p < 0.05$ ).

The tight wearing might have increased abdominal pressure by narrowing the wear circumference. Elevated abdominal pressure could be causes multi-directional stiffness of the spine (6, 7). This mechanical change would also increase pressure of the knee joint contributing to muscle imbalance (8).

The findings suggest that tight clothing can contributes to candidiasis, an organism that can cause vaginitis. The increased rate of *Candida albicans* observed in wearers of tight clothing especially with nylon underwear. Tight wears creates moisture in the vaginal and cervical areas can increased to growth of this yeast (9-13).

We started a study about this important issue because there are no sufficient studies in the literature in this topic.

## METHODS

In this retrospective study, 44 women aged between 15 and 32 years were searched in Bezmialem Vakif University, Faculty of Medicine, Department of Obstetric and Gynecology. Twenty-four women in the 1st group were dressed in tight pants for at least 5 years and 20 women in the second group were dressed in loose trousers or skirts for at least 5 years.

## RESULTS

In the study, 50% of the women in group 1 had knee pain and 62.5% had vaginal infections. In the control group, knee pain and vaginal infection rates were 5% and 25%, respectively.

In addition, 25% of the skin reactions were found in Group 1, whereas only 5% were found in the control group.

Weakness in leg muscles was found as low as 8.3%. However, for those wearing tight trousers that are longer than 5 years, this ratio is increased to 16.6%.

**Table 1:** Complication and symptom rates of wearing to tight trouser or looser

Complications	Head pain (n)	Knee pain (n)	MW Leg (n)	Vaginal inf. (n)
Tight trouser	16/24 66.6%	12/24 50%	2/24 8.3%	24/24 62.5%
Loose wearing	6/20 30%	1/20 5%	0/20 0%	5/20 25%

n: Patient number inf: Infection

## DISCUSSION

Young girls wear narrow pants in widespread because fashion. This clothing is causing a lot of complaints with the reason that the uncomfortable o tight pants. Sometimes it has been reported that serious infections, muscle weakness, osteoporosis are causing irreversible serious problems (1-13).

In the study, 50% of the women in group 1 had knee pain and 62.5% had vaginal infections. Although the weakness in the leg muscles is lower and it is 8.3%, this is a serious complication. In this study also shows to head pain and skin dermatitis are common complaint of womans that wearing the tight pants.

In other studies showed that especially hip tight jeans cause vaginal and nerve compression in the

pubic region. Tight pants or jeans could cause a nerve entrapment in the groin area called "meralgia paresthetica" in the waist region, resulting in a loss of sensation in the legs (14). Experts said that narrow jeans press the veins in women and cause cystitis and varicose veins. The researchers said that the tightness of the belly and the stomach area, which is over-tightening, triggers stomach discomforts such as reflux, gastritis and ulcers. Wearing jeans disrupts the body balance, especially in summer. The men who spend time with hot jeans in hot environments are at risk for infertility (2, 8, 14, 15).

The incidence of candidiasis evaluated in one study with two groups of voluntary participants wearing tight and loose fitted dresses by both microscopic and cultural techniques for a period of two months (15). The results showed to two-thirds of the positives tests for candidiasis in belonged those patients wearing tight clothing ( $P < 0.05$ ) (9-21).

## CONCLUSION

In this study, it has been shown that narrow trousers may cause serious symptoms and complications such as head and knee pain, skin reactions, weakness in leg muscles, vaginal infection. More work on this issue should be made and community members should stop giving in to this trend.

## REFERENCES

- 1.Park SY, Yoo WG. Effect of Wearing a Tight Waist Belt on the Sagittal Kinematics of the pelvis during Sit to stand. *J Phys Ther Sci.* 2014;26(3): 435-436
- 2.Mori Y, Kioka E, Tokura H: Effects of pressure on the skin exerted by clothing on responses of urinary catecholamines and cortisol, heart rate and nocturnal urinary melatonin in humans. *Int J Biometeorol*, 2002, 47: 1-5 [PubMed]
- 3.Dall PM, Kerr A: Frequency of the sit to stand task: An observational study of free-living adults. *Appl Ergon*, 2010, 41: 58-61 [PubMed]
- 4.Seven YB, Akalan NE, Yucesoy CA: Effects of back loading on the biomechanics of sit-to-stand motion in healthy children. *Hum Mov Sci*, 2008, 27: 65-79 [PubMed]
- 5.Sibella F, Galli M, Romei M, et al. Biomechanical analysis of sit-to-stand movement in normal and obese subjects. *Clin Biomech (Bristol, Avon)*, 2003, 18: 745-750 [PubMed]
- 6.Cholewicki J, Juluru K, McGill SM: Intra-abdominal pressure mechanism for stabilizing the lumbar spine. *J Biomech*, 1999, 32: 13-17
- 7.Neumann DA: *Kinesiology of the musculoskeletal system.* St. Louis: Mosby, 2002
- 8.Miyamoto K, Iinuma N, Maeda M, et al. : Effects of abdominal belts on intra-abdominal pressure, intramuscular pressure in the erector spinae muscles and myoelectrical activities of trunk muscles. *Clin Biomed*, 1999, 14: 79-87.
- 9.Sauer GC: Monilial vaginitis (letter). *JAMA* 1974; 227:941.
- 10.Tann J: Wearing Tights (letter). *Brit Med J* 1968; 4:776.
- 11.Breen JT: Vaginitis-Tights (letter). *Brit Med J* 1971; 1:610.
- 12.Stallworthy J: Vaginitis and Tights (letter). *Brit Med J* 1971; 2:108.
- 13.Bull MJV: Wearing Tights (letter). *Brit Med J* 1969; 1:120.
- 14.Wongmek A, Shin S, Zhou L. Skin biopsy in assessing meralgia paresthetica. *Muscle Nerve.* 2016;53(4):641-3.
- 15.Elegbe IA, Botu M. A Preliminary Study on Dressing Patterns And Incidence of Candidiasis. *Am J Public Health.* 1982 Feb;72(2):176-7.
- 16.Ris HW, Dodge RW: Trichomonas and yeast vaginitis in institutionalized adolescent girls. *Am J Dis Child* 1973; 125:206- 209.
- 17.Land GA: Opportunistic mycotic infections and malignancies. *J Clin Haematol & Oncol* 1976; 6:113-139.
- 18.Chipperfield EJ, Evans BA: Effect of local infection and oral contraception on immunoglobulin levels in cervical mucous. *Infection and Immunity* 1975; 11:215-221.
- 19.Lennette EH, Spaulding EH, Truant JP: *Manual of Clinical Microbiology*, 2nd Ed. Washington, DC: American Society of Microbiology, 1974, pp 942-943.
- 20.Brashear MD, Wong J, Hines P, Smith RF: Comparative isolation of vaginal yeasts on selective and non-selective media. *J Clin Microbiol* 1976; 3:640-642.
- 21.Giraldo PC, Polo RC, do Amaral RL, Reis VV, Beghini J, Bardin MG. Habits and traditions

of female college students related to intimate clothing, genital adornments, genital hair removal and sexual practices. *Rev Bras Ginecol Obstet.* 2013 Sep;35(9):401-6.