The knowledge of beauty salon clients about hallux valgus therapy. Preliminary study

Niczyrpk M. 1*, A-F, Pupek P. 2A-E, Masłowska J. 3A.C.E, Knaś 3A.C.E.F

1. Department of Esthetic Medicine, Medical University of Bialystok, Poland
2. student of Cosmetology, Lomza State University of Applied Sciences, Poland
3. Department of Cosmetology, Lomza State University of Applied Sciences, Poland

A- Conception and study design; B - Collection of data; C - Data analysis; D - Writing the paper;
E- Review article; F - Approval of the final version of the article

ABSTRACT

Introduction: Hallux valgus is a frequent painful deformity of the feet, and occurs most often in women of different ages. People with hallux valgus have, among others, a genetic predisposition, a weaker ligament-and joint structure of the foot, pes planus (flatfoot), rheumatoid arthritis, muscular balance disorders, are obese, and wear improper footwear.

Purpose: To assess the knowledge of beauty salon clients on the subject of professional care of hallux valgus.

Materials and methods: Research was conducted in a beauty salon in Lomza, Poland using an original questionnaire. The study was approved (No. 4/2013) by the senate of the Ethics Committee of the Lomza State University of Applied Sciences.

Results: The conducted research showed that 48% of the surveyed women dealt with hallux valgus using orthopedic insoles, and 26% underwent procedures recommended by a specialist. Respondents knew kinesiotherapy and taping as treatment methods for this ailment. The vast majority of the surveyed women would undergo nonsurgical hallux valgus treatment, and only a few would opt for surgery.

Conclusions: The knowledge of the studied women about hallux valgus was quite extensive.

Keywords: cosmetology, hallux valgus, students' knowledge

DOI

*Corresponding author:
Marek Niczyrpk, M.D., Ph.D.
Department of Esthetic Medicine, Medical University of Bialystok
3 Akademicka Str., 15-267 Bialystok, Poland
e-mail: niczy.ma@gmail.com

Received: 07.01.2019
Accepted: 25.03.2019
Progress in Health Sciences
Vol. 9(1) 2019 pp 65-69
© Medical University of Bialystok, Poland
INTRODUCTION

Hallux valgus, also commonly called a “bunion”, is a frequent painful deformity of the feet. It is associated with deformation of the first metatarsophalangeal (MTP) joint, a lateral deviation of the big toe resulting in a medial deviation of the first metatarsal bone, forming an exostosis, and may be accompanied by bursitis and joint inflammation [1,2]. Although the deformation originally refers to the first MTP joint, for the metatarsal bone axis to drift medially, the metatarsocuneiform joint angle is also altered [3,4].

Deformation causes discomfort associated with inflammation. The most common complaint in the case of hallux valgus is painful medial prominence [5,6], metatarsophalangeal joint [4,7], and the remaining metatarsal or navicular bones. The accompanying symptoms are a burning sensation under the metatarsal heads, swelling and redness [1,2].

As a result of toe deformation, the foot biomechanics are changed. The weight of the body is unevenly distributed, and the toe is no longer a sufficiently strong support point when walking. The foot stabilizing structures deteriorate and the muscles weaken [4,8]. An important element is the selection of appropriate footwear. High heels cause that the weight of the body rests on the toes and the midfoot instead of on the heels, thus it is best to wear flat shoes or 3-4-centimeter, wide heels. It is also important that the toes are able to move freely. Also too small shoes contribute to the formation of hallux valgus and hammer toe. Proper shoes should be half a centimeter longer than the longest toe. The sole of the shoe is also important because too thin and stiff does not absorb the shocks that accompany walking, which can result in micro-injuries of the foot [3,9,10].

The most common cause worsening the quality of life of people affected by hallux valgus is pain [1,2], which intensifies especially when walking, when the deformity rubs against the shoe. This causes that the person feels enormous discomfort and their quality of life deteriorates. In addition, postoperative complications also affect the quality of life of people with hallux valgus [7,8]. Contemporary medicine aims to restore the quality of life of people with hallux valgus to the state before the disease.

The aim of this study was to assess the knowledge of beauty salon clients on the subject of professional care of hallux valgus.

MATERIALS AND METHODS

The study on the knowledge of beauty salon clients on the subject of the treatments used for hallux valgus was conducted among 50 selected clients of “NATURA” Beauty Salon in Lomza, Poland.

The study was conducted based on a survey using a proprietary questionnaire. The study was approved (No. 4/2013) by the Senate of the Ethics Committee of the Lomza State University of Applied Sciences. Participation in the study was voluntary and anonymous. The obtained information was only used for scientific aims and with complete confidentiality in accordance with the Personal Data Protection Act (Journal of Laws No. 133, item 833, of 29th August 1997).

The study was conducted between March and April 2016. Among the respondents, 44% were aged 30-49 years, women aged 19-29 accounted for 30%, 18% were women aged 50-69, and 8% over 70 years old. The largest number of the surveyed women had a secondary education (46%). Respondents with a higher education accounted for 40%, while 4% had a vocational education. The vast majority of the surveyed women (70%) came from the city, while the remaining 30% were rural residents.

RESULTS

The conducted research showed that as many as 88% of the surveyed women led an active lifestyle, and the remaining 12% assessed their lifestyle as inactive. A majority of the surveyed women (76%) took advantage of cosmetic treatments for the feet, while the remaining 24% did not. For most of the respondents (64%), the topic of foot problems was not shameful, while for 22% it was very embarrassing. The remaining 14% of the surveyed women had no opinion on this subject. In the case of 56% of the respondents, their families had a history of foot problems, while 24% did not have a family history of the disease. A total of 20% of women did not have knowledge on this topic. More than a half (54%) of the women knew the term “bunion”, while 38% had heard about this condition, but they had never had experience with it, and 8% of the respondents did not have any knowledge about it at all.

The vast majority of the surveyed women (78%) were aware that hallux valgus was painful, and 16% had no opinion about this topic. Whereas, 6% of respondents were of the opinion that hallux valgus does not cause pain. When asked about the causes of hallux valgus, more than half of the surveyed women (58%) indicated uncomfortable footwear, while 12% believed that it was too much weight on the feet. A small percentage of women indicated a genetic predisposition (6%) and overweight (4%).

A total of 54% of the respondents had problems with hallux valgus and the remaining 46% did not have such symptoms. In the case of 42% of
the women, the first symptom of hallux valgus was forefoot pain, and 38% observed redness and swelling. Whereas, 14% of the surveyed women felt discomfort while wearing shoes. In the case of 44% of the respondents, the pain was in the form of a burning sensation, while 32% felt a shooting pain. The remaining 22% experienced chronic pain.

The conducted research showed that 48% of the surveyed women dealt with hallux valgus using orthopedic insoles, and 26% underwent procedures recommended by a specialist. A slightly smaller group of respondents (22%) underwent special rehabilitation or exercise, and 4% did not treat these symptoms. The vast majority of the surveyed women (74%) stated that in their opinion a person with hallux valgus should go to an orthopedic surgeon, and 18% to a podologist. While 6% of the respondents decided that the appropriate doctor in this case would be a family doctor, and 2% would go to a beautician.

More than half of the surveyed women (66%) obtained information about hallux valgus from the Internet, 18% from a doctor, 10% from a beautician, and 6% from popular magazines. This study shows that 48% of the respondents were familiar with kinesiotherapy as a treatment method for hallux valgus, 36% taping, 8% PNF method (proprioceptive neuromuscular facilitation), and 4% manual therapy. The vast majority of the surveyed women (94%) would undergo non-surgical hallux valgus treatment, and only 6% would opt for surgery. Hallux valgus deformation significantly affected the quality of life of 76% of patients (feeling pain caused irritability).

DISCUSSION

Hallux valgus, commonly referred to as bunion, is one of the most common deformities of the foot. This disease is a painful deformation of the forefoot at the level of the first metatarsophalangeal joint, characterized by a lateral deviation of the first metatarsal bone axis and a medial deviation of the toe axis. According to many authors [1,4,8-12], hallux valgus is a disorder caused by, among others, wearing inadequate shoes, especially too tight, high heels or narrow/pointed toes. It is assumed that for hallux valgus to develop certain predispositions in the construction of the foot must occur, and improper footwear contributes to increasing discomfort and accelerated progress of deformation. Our research shows that the respondents had adequate knowledge on this subject. When asked about the causes of hallux valgus, more than half of the surveyed women (58%) indicated uncomfortable footwear, while 12% believed that it was too much weight on the feet.

The relationship between the deformity and flat feet raises a lot of controversy. Many authors emphasize a tendency for a pronated foot to develop hallux valgus. The coexistence of generalized ligamentous laxity cannot be ruled out, which usually results in excessive pronation as well as supination. This contributes to foot instability, facilitating hypermobility and hallux valgus formation [1,10,11].

Some authors believe that excessive mobility is a rare cause of hallux valgus. Whereas, other researchers suggest that the hypermobility of the first metatarsal bone is the basic pathology that leads to the formation of this deformity. Despite all these controversies, it is indisputable that for medial deviation drift of the first metatarsal bone to occur, there must be some degree of deformation or instability of the first MTP joint. Joint laxity of the first radius occurs in three areas, which results in the possibility of dorsal subluxation of the metatarsal bone in relation to the cuneiform bone. The clinical symptom of this pathology is a sagging or collapse of the arch of the foot. This enables a logical explanation as to why hallux hallux deformity is often accompanied by flat feet. Dorsal translocation of the first radius results in the transfer of the foot support point towards the second radius, which in turn leads to metatarsalgia and overburdening of the second MTP joint. Such changes often accompany hallux valgus [1,3,8,11].

Ostrowski et al. [12] and Prusinowska et al. [13] reported that genetic predisposition plays an important role in the occurrence of hallux valgus. Other, or additional, predisposing factors may also be obesity and standing types of work, according to the authors. Only a small percentage of the surveyed women had knowledge about this subject, who identified a genetic predisposition (6%) and overweight (4%) as the cause of hallux valgus.

According to Klimczak et al. [5] and Srokowski et al. [6], the most common main complaint in hallux valgus is a painful medial prominence. Whereas, Marczyński [7] considers metatarsophalangeal joint pain a symptom of hallux valgus. However, Waldman [14] reports that in extreme cases, pain, swelling, and inflammation of the metatarsophalangeal joint capsule occur. Our research indicates that in 42% of the women, the first symptom of hallux valgus was forefoot pain, and 38% observed redness and swelling. In the case of 44% of the respondents, the pain was characterized by a burning sensation, while 32% felt a shooting pain. The remaining 22% of them experienced chronic pain.

Michalak [9] is of the opinion that in the case of inflammation, pads, protector rings, and inserts that pull the toe towards the outside are helpful. Such a cover protects from pressure, reduces pain, and prevents swelling. For metatarsalgia-type pain, orthopedic inserts with a metatarsal pad can also be used. The conducted research showed that 48% of the surveyed women dealt with hallux valgus.
As a deformity that brings with it enormous pain, discomfort and inflammation, hallux valgus significantly worsens the quality of life of patients. Also, this study shows that hallux valgus significantly affects the quality of life of patients, because most of them (76%) were irritated with people in their environment due to pain [1,2,20]. Research carried out by Wyderka, Gronowska and Szelag [20] proved that burdensome pain, which patients experienced before surgery, resolved completely or almost completely after the operation. The vast majority of respondents did not feel the need to take analgesics, and the cosmetic defect, which is so important for women, was reduced or completely disappeared.

CONCLUSION

Knowledge about hallux valgus among the studied women was quite extensive. They associated the disease with pain (burning sensation, shooting pain, chronic pain), redness, and swelling of the forefoot. The women knew that orthopedic insoles, kinesiotherapy, taping, and surgical treatment are used in the treatment process. The respondents were also aware that hallux valgus significantly affects the quality of life, but only 6% would opt for surgical treatment.

Conflicts of interest

The authors declare that there are no conflicts of interests regarding the publication of this study.

Funding

None.

REFERENCES