Leser-Trelat Sign Without Malignancy in a Geriatric Patient A Case Report

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SUMMARY: Leser-Trélat sign is characterized by the abrupt appearance of multiple seborrheic keratoses, which are often pruritic, usually it is associated with an underlying malignant disease. Here we report a case of 72-year-old healthy woman with Leser-Trélat. She is consulted to dermatology for her rapidly growing lesions over her lower abdominal and suprapubic regions for seven months. She oriented to our clinic for malignity scanning. We were followed for 1 year and not detected any internal cancer. To date, almost all cases of Leser-Trélat sign have been reported in association with an underlying malignancy. It is less known that Leser-Trélat sign can also occur in healthy individuals in the absence of internal malignancy. Leser-Trélat sign of the patients are evaluated for malignancy and the screening of suspect cases is important. A new and rapidly growing seborrheic keratoses; Leser-Trelat sign is important and suspected cases should be screened for malignancy.

KEY WORDS: Leser- Trelat Sign, internal malignancy, seborrheic keratosis.

ÖZET: Leser- Trelat işareti kaşıntılı çoklu seboreik keratotik lezyonlar olarak tanımlanır ve sıklıkla altında yatan malignitelerle ilşkilidir. Burada 72 yaşında Leser-Trelat işareti olan bir bayan sunduk. Dermatoloji kliniğinden 7 ayda karın alt kadranda ve suprapubik alanda hızla büyüyen lezyonlarla konsülte edildi. Kliniğimizde malignite tarandı. Bir yıllık takibimizde herhangi bir malignite tespit edilemedi. Bugüne kadar, Leser-Trélat işareti hemen hemen tüm durumlarda altta yatan bir malignite ile birlikte bildirilmiştir. Daha az bilinen ise Leser Trelat işaretinin malignite olmadan da görülebileceğidir. Yeni ve hızla çoğalan seboreik keratoz; Leser-Trelat işareti önemlidir ve şüpheli vakalar malignite açısından taranmalıdır.

ANAHTAR KELİMELER: Leser-Trelat Sign, malignite, seboreik keratoz

1. Introduction

Leser-Trelat sign, first described by Edmund Leser and Ulysse Trelat, characterized by sudden eruption of numerous seborrhoeic keratoses, usually associated with pruritus and it is generally accepted as a marker of an internal malignancy. [1]. In 1900, a subsequent report clearly defined the association of seborrheic keratosis and cancer. [2] Because both seborrheic keratoses and cancer are common in the elderly, it is not always easy to tell from the literature or in any given patient if this sign is present. [3]

Case Report

72 years old women oriented to our internal medicine clinic from dermatology unit in order to investigate etiology of multipl seborrheic keratosis. She had darkpapular, pruritic lesions on her lower abdominal and suprapubic areas for seven months but there is not any pain or drainage from these lesions. [Figure 1]. She has coronary artery disease and had abdominal undergone histerectomy before. She had had also constipation for five years. Physical examination reveales that her body mass index (BMI) is 30 and she has multiple seborrheic keratosis on lower abdominal and suprapubic areas. Although there is no symptom of a suspicious malignancy she was investigated. Laboratory test results were as follows: Hgb:11,4g/dl MCV:81fl vit B12:150 pg/dL ferritin:13 µg/l fasting plasma glucose: 95mg/dl fasting İnsulin: 16 mU/L HOMA: 3,7 and tumor markers were normal. Posteroanterior chest radiography, abdominal and breast ultrasonography, mamography, upper and lower gastrointestinal (GIS) endoscopy, thoracoabdominal computerized tomography (CT) were performed. Upper GIS endoscopy revealed antral erosions and gastic ulcers. Biopsy result was chronic gastritis. Bone mineral dansitometry result revealed osteopenia but it is associated with benign process. Her antiparietal cell antibodies was negative, 25-hydroxy vitamin D was 14 nmol/L. She was prescribed vitamin B12 i.v per month and calcium / D vitamin replacement. We suggested that we give to the patient diet therapy and weight loss and called control.



Figure 1. Suddenly growing multiple seborrheic keratosis

2.Discussion

Usually, the sign of Leser-Trélat is associated with adenocarcinoma, most frequently of the colon, breast, or stomach, but also of the lung, kidney, liver, and pancreas.[4] The average age at onset Leser Trelat sign is about 60 years. In the literatüre hase been described rarely young cases. [5]. Heaphy et al. suggest that it would be useful to distinguish between a "sign of Leser-Trélat" and a "syndrome of Leser Trélat." They propose that the "sign of Leser-Trélat" be defined as a sudden acute efflorescence of seborrheic keratoses sometimes

accompanied by pruritus or acanthosis nigricans (or both). According to this definition, the sign may be present with or without occult malignancy and detectable on history and physical examination alone. The term "syndrome of Leser-Trélat" would then be used to describe a paraneoplastic syndrome in patients with the "sign of Leser-Trélat" in malignancy whom an occult identified after the appearance of the sign.[6] Therefore one patients should be followed in a long period for determining Lesser Trelat as a syndrome's finding. The cause of the Leser Trelat sign is unknown. This paraneoplastic syndrome is thought to berelated to a tumor- derived circulating growth factor which induces epidermal proliferation and results in the rapid development of multipl seborrheic keratosis. [7] The importance of immunohistochemical analyses of endogenous mediators such as epidermal growth factor receptor protein and the consequent high risk of underlying malignancies have been described. [4] Moleculer genetics has shown that somatic fibroblast growht factor receptor 3(FGFR3) and phosphatidylinositol 3kinase catalytic subunit $\alpha(PIK3CA)$ mutations are involved in the pathogenesis of seborrheic keratosis, although the precise mechanisms and the signaling responsible are still unclear. Unlike seborrheic keratosis,the seborrheic keratosis in Leser- Trelat sign would not be associated with any FGFR3 or PIK3CA mutations, because activation of involved signal patways would be due to an excess of ligands secreted by the cancer cells.[8] The release of insülin- like growth factor-1 (IGF- 1) and the stimulation of insülin receptors and IGF-1 receptors may also be the mechanism by which neoplasias produce the Leser- Trelat sign. [9] Another potencial mechanism for these

lesions relates to the posible role of human papillomavirus as an etiological factor in seborrheic keratoses, especially in immunocompromised patients with human immunodeficiency virus infection [10].

3. Conclusion

This case describes Leser Trelat sign in a healthy women. We investigated the case for the patients age and for her rapidly growing seborrheic keratosis in order to exclude any malignancy. However there was not any malignancy sign. These findings shows that Leser Trelat sign sometimes do do not refer and pathology and seems as a benign condition. IGF-1 in the setting of hyperinsulinemia provide a unifying hypotesis for he appearance of Leser- Trelat sign in our patient. In the present case we didn't find pathology under screening tests. These lesions;that we called Lesser- Trelat sign, may develop in patients without malignancy to should keep in mind. However, patients with a history of acute onset and rapid increse in size and number of multipl seborrheic keratoses must be evaluated by a screening program in order to rule out any underlying cancer.

REFERENCES

- 1. Sneddon, I. B. Roberts, J. B. (1962). An incomplete from of acanthosis nigricans. *Gut.* 3, 269-72.
- 2. Hollander, E. V. (1900). Beitrage zur Fruhdiagnose des Darmcarcinomas (Hereditatsverhaltnisse und Hautveranderungen) *Dtsch Med Wochenschr.* 26, 483-85.
- 3. Schwartz, R.A. (1996). Sign of Leser-Trélat. *J Am Acad Dermatol*.35, 88-95.
- 4. Ponti, G. Luppi, G. Losi, L. Giannetti, A. Seidenari S. (2010). Leser-Trélat syndrome in patients affected by six

- multiple metachronous primitive cancers. *J Hematol Oncol.* 3,2.
- 5. Baron, L. A. Prendiville, J. S. (1992). The sign of Leser- Trelat in a young woman with osteogenic sarcoma. *J Am Acad Dermatol*. 26, 344-47
- 6. Heaphy, M. R. Jr, Millns, J. L. Schroeter, A. L. (2000). The sign of Leser-Trélat in a case of adenocarcinoma of the lung. *J Am Acad Dermatol.* 43, 386-390.
- Ellis, D. L. Kafka, S. P. Chow, J. C. Nanney, L. B. Inman, W. H. Mc Cadden, M. E. King, L. E. (1987). Jr.

- Melanoma, growth factors, acanthosis nigricans, the sign of Leser-Trelat, and multipl acrochordons: a possible role of alpha-transforming growth factor in cutaneous paraneoplastic syndromes. *N Engl J Med*.317,1582-87.
- 8. Hafner, C. Vogt, T. (2008). Seborrheic keratosis. *J Dtsch Dermatol Ges.* 6, 664-77.
- 9. Gallagher, E. J. LeRoith, D. (2010). The proliferating role of insulin and

- insülin- like growth factors in cancer. *Trends Endocrinol Metab.* 21, 610-18.
- 10. İnamadar, A. C. Palit, A. (2003). Eruptive seborrkoeic keratosis in human immunodeficiency virus infection: a coinsidence or 'the sign of Leser Trelat' *Br J Dermatol*. 149, 435-36.