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### Xanthelasma Palpebrarum In A Young Adult Male Patient

Riana Miranda Sinaga<sup>1</sup>, Nahrisyah<sup>\*1</sup>

<sup>1</sup>Department of Dermatology and Venereology, Faculty of Medicine University of Sumatera Utara, Medan, Indonesia, 20155 and Prof. Dr. Chairuddin P Lubis Universitas Sumatera Utara Hospital, Medan, 20154, Indonesia

\*Corresponding Author: [nahrisyah.dr@gmail.com](mailto:nahrisyah.dr@gmail.com)

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#### ABSTRACT

**Background:** Xanthelasma palpebrarum is a most common form of xanthoma characterized as lesion with yellowish colour, flat, soft, and mostly found in medial corner of eyelids. Most cases of xanthelasma are associated with hyperlipidemia.

**Case Reports:** A male aged 37 presented with yellow patches on both upper eyelids since  $\pm 2$  years ago. Vital sign within normal limit. Dermatological examination found yellowish plaques with clear boundaries sized 0.5 cm located on medial canthus of the supraorbital dextra and sized 1 cm located on medial canthus of the supraorbital sinistra. Laboratory test showed that hypercholesterolemia. The patient then underwent excision surgical procedure.

**Discussion:** Xanthoma is a plaque consisted abnormal deposition of lipid and foam cells. Generally, this condition is found in aged 40–60 years old. The condition is found more in females than males, on superior palpebrae as the most common location. Diagnosis is established based on history and dermatological evaluation. The aim of xanthelasma management is mostly cosmetic-related. Elliptical or fusiform excision is the most method applied. **Conclusion:** A 37 years old male with xanthelasma palpebrarum on bilateral upper eyelids with hypercholesterolemia was treated with surgical excision. The surgical wound appeared well later on the 6th days and a month post-surgery.

**Keywords:** *elliptical excision, hyperlipidemia, male, xanthelasma palpebrarum*

#### ABSTRAK

**Latar Belakang:** Xantelasma palpebrarum merupakan bentuk xantoma yang paling umum dengan lesi berwarna kekuningan, datar, lunak, dan sebagian besar terletak di sudut medial palpebra. Sering dikaitkan dengan hiperlipidemia. **Laporan Kasus:** Seorang laki-laki 37 tahun datang dengan bercak kekuningan pada kedua sudut kelopak mata atas sejak  $\pm 2$  tahun lalu. Tanda vital dalam batas normal. Pemeriksaan dermatologis ditemukan plak berwarna kekuningan, dengan diameter berukuran 0,5 cm berbatas tegas pada regio kantung medial supraorbital dekstra dan 1 cm berbatas tegas pada regio kantung medial supraorbital sinistra. Pemeriksaan laboratorium menunjukkan kolesterol total 215 mg/dL, HDL 45 mg/dL, LDL 126 mg/dL, dan trigliserida 110 mg/dL. Pasien kemudian direncanakan untuk dilakukan bedah eksisi. **Diskusi:** Xantoma adalah plak yang terdiri dari endapan lipid abnormal dan sel busa. Umumnya kondisi ini muncul pada usia 40-60 tahun, ditemukan lebih banyak pada perempuan dibandingkan dengan laki-laki dan palpebra superior sebagai lokasi tersering. Diagnosis umumnya ditegakkan berdasarkan anamnesis dan pemeriksaan dermatologis. Penatalaksanaan xantelasma ditujukan untuk mengatasi gangguan kosmetik. Eksisi elips merupakan metode yang paling banyak digunakan. **Kesimpulan:** Seorang pria 37 tahun dengan xantelasma palpebrarum pada palpebra superior bilateral dengan hiperkolesterolemia ditangani dengan bedah eksisi. Luka tampak baik saat kontrol 6 hari dan satu bulan pasca tindakan.

**Kata Kunci:** eksisi elips, hiperlipidemia, laki-laki, xantelasma palpebrarum



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### 1. Introduction

Xanthelasma palpebrarum, commonly referred to as xanthelasma, is the most prevalent type of xanthoma. It typically appears as a flat, yellowish lesion on the inner corner of the eyelid, which can lead to cosmetic concerns. The prevalence is around 4.0%, with a higher occurrence in women (1.1%) compared to men (0.3%) with most cases appearing in the fourth or fifth decade of life. Factors such as hyperlipidemia, thyroid dysfunction, and diabetes mellitus are potential triggers for the development of xanthelasma.<sup>1-4</sup> Various treatment modalities exist, such as surgery treatment and non-surgery.<sup>4-6</sup> This case report discussed about a surgery in xanthelasma palpebrarum.

### 2. Case Reports

A 37-years-old male presented with bilateral circular yellowish patches, painless, localized on both medial corner of the upper eyelids since  $\pm 2$  years ago. The lesions started to appear at medial aspect of the upper eyelid and spread to the lateral sides. This lesion has become more prominent in the last 9 months. History of trauma, previous liver dysfunction, hyperlipidemia, similar complaints are all denied. The patient seek treatment due to cosmetic reason. There is no similar condition in his family. On physical examination, the patient appeared generally well, fully conscious, well-nourished, vital sign within normal limit. Dermatological examination shows a yellowish-flat-plaques with well-defined border, about 0.5x0.1 cm located on medial canthus of the supraorbital dextra and about 1x0.5 cm located on medial canthus of the supraorbital sinistra. (Figure 1).



Figure 1. Yellowish flat plaques, well-defined border, about 0.5x0.1 cm located on medial canthus of the supraorbital dextra and about 1x0.5 cm located on medial canthus of the supraorbital sinistra.

Based on the examination, the patient was diagnosed with xanthelasma palpebrarum. The patient was then planned to undergo surgical elliptical excision. The results of pre-surgical laboratory test are all within normal limit. Lipid profile showed that patient has hypercholesterolemia.

Excision began with an aseptic procedure with povidone iodine solution and NaCl 0.9% then the excision site was close with surgical drapes and then an anesthesia started by using infiltration technique of 2% lidocaine. Elliptical excision was performed. After that the wound was closed with simple interrupted suture with polypropylene 6-0, gentamycin 0.1% ointment was applied and the wound was closed with sterile dressing. The patient was educated to keep the wound dry and to avoid any mechanical trauma. Figure 2 shows the follow up after surgery.

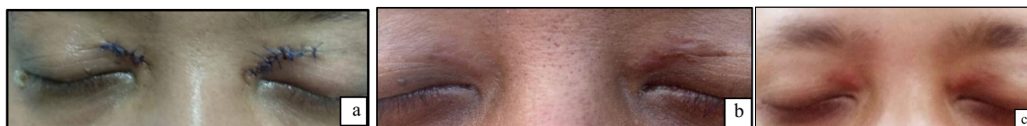


Figure 2. Follow up after surgery. (a) Surgical wound was sutured excellently on 6<sup>th</sup> day post-surgery; (b) post suture removal; (c) a month post-surgery.

### 3. Discussion

Xanthelasma palpebrarum is marked by fatty deposits around the eyes beneath the skin's surface. The lesions can present in various forms, from raised, waxy yellow plaques to red-brown macules, papules, or nodules with differing consistencies.<sup>2,7</sup> The development of xanthelasma palpebrarum is associated with the deposition of lipids in the skin and subsequent inflammation. A previous study involving 50 patients with xanthelasma found that 40% of cases had hypercholesterolemia, while hyperlipidemia was reported in approximately 50% of patients with the condition.<sup>8,9</sup>

Although xanthelasma is usually asymptomatic, it can lead to cosmetic and psychological concerns for

patients because of its prominent location on the face. While various treatment options are available, the most common treatment is surgery. The primary method is excisional surgery, which can be combined with procedures such as blepharoplasty, local flaps, or total skin grafting.<sup>10</sup>

Excisional surgery is a procedure in which tissue (such as a tumor) is removed through excision. It serves multiple purposes, such as conducting diagnostic biopsies, treating benign or malignant lesions, and enhancing cosmetic appearance. Elliptical or fusiform excision is the most widely used method for removing round or linear lesions. This technique is the preferred because of the ease of wound closure and long axis of the excision is oriented in line with relaxed skin tension lines (RSTL) to achieve optimal cosmetic results. Prior to wound closure, *undermining* is needed to be done just below the dermis to reduce the tension of wound closure. Ideally, the wound is closed using a ‘*rules of halves*’ pattern, which first started from the middle, then followed by subsequent suturing with the same pattern.<sup>11,12</sup>

#### 4. Conclusion

A 37-years-old male presented with yellow lesions on both upper eyelids since  $\pm 2$  years ago. On dermatological examination, show yellowish plaques with clear boundaries sized 0.5 cm located on medial canthus of the supraorbital dextra and sized 1 cm located on medial canthus of the supraorbital sinistra. He also had hypercholesterolemia. Elliptical or fusiform excision is the most widely used method. This technique is the preferred because of the ease of wound closure and long axis of the excision is oriented in line with relaxed skin tension lines (RSTL) to achieve optimal cosmetic results. The surgical wound appeared well at follow up on the 6th days and a month post-surgery.

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