

## Young Lady with Bilateral Yellowish Lesions on Her Eyelids

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### Case summary

A 26-year-old woman with an unknown medical illness presented with yellowish skin lesions around both eyes, visible for the past 4 years. The lesions were neither itchy nor tender and had increased gradually in size. She had neither constitutional nor hyperthyroidism symptoms. She is the youngest out of four siblings, and none of her family members have cardiovascular disease or similar problems. Upon examination, there were bilateral yellowish plaques over the periorbital region. Her body mass index (BMI) was 23.8 kg/m<sup>2</sup>. Her vital signs were all normal at every visit.



**Figure 1.** Yellowish plaque on bilateral eyelids.

### Questions

1. What is the provisional diagnosis?
2. State one investigation required to look for associated disease?
3. How would you manage the above condition?

### Answers:

1. Xanthelasma Palpebrarum (XP).
2. Fasting Lipid Profile.
3. The management approach for XP depends on the lesions' characteristics, such as the consistency and size of the lesions. Approaches can be divided into non-invasive and invasive treatments. In a non-

invasive treatment, the underlying cause is treated. The most common related cause is hyperlipidaemia, which is reported in about half of the patients with xanthelasma.<sup>1</sup> In this case, her cholesterol level indicated the need for treatment. Therefore, her condition should be treated with an anti-lipid agent. Apart from an anti-lipid agent, regular exercise and dietary modifications are suggested to manage the underlying hyperlipidaemia in order to reduce the patient's cardiovascular risk factors. Lowering the lipid level may induce the regression of xanthelasma in some patients; however, the effect is not consistent.<sup>2</sup> Invasive treatments focus on local treatment of the lesion, mainly for cosmetic purposes. Previous common practices used to remove this type of lesions were cautery and laser ablation.<sup>1</sup> Nowadays, chemical cauterization

using trichloroacetic acid (TCA) is being practiced by most physicians. The practice is a simple, cost-effective, and safe office procedure. However, it still requires multiple applications to achieve satisfactory results.<sup>3</sup> Regardless of whether patients have or have not received treatment for xanthelasma, it is important to follow up with exploration for cardiovascular diseases and lipid profiles of the patients.

### Discussion

There are many types of cutaneous xanthoma, such as eruptive xanthomas and tendinous xanthomas. Cutaneous manifestations of systemic disease can be an early warning sign or a late manifestation of a chronic disease. The lesion is frequently associated with cardiovascular disease, diabetes, and obesity. It is also a feature of diseases such as primary biliary cholangitis and primary disorders of low-density lipoprotein (LDL)-cholesterol metabolism. Xanthelasma Palpebrarum is the most common cutaneous xanthoma, and it is commonly seen in primary care clinics.<sup>1</sup> Patients with XP have lipid abnormalities ranging from 9.1% – 67.9%.<sup>3</sup> Thus, the need to determine a full lipid profile in these patients is present mainly to detect those who are potentially at increased risk of cardiovascular disease.<sup>4,5</sup> Researchers differ in their opinions on the lipid metabolism related to XP. Most findings related to dyslipidaemia differ in the type of lipid involved. Sharma et al. (2013) showed that XP was related to abnormal lipid levels, particularly total cholesterol, the low-density lipoprotein (LDL) level, and the Chol:HDL (cholesterol: high-density lipoprotein) ratio. Insignificant relations were found between XP and

triglyceride and very-low-density lipoprotein (VLDL) levels.<sup>6,7</sup> In a control case study among the Iran population, there was no significant association with hypercholesterolemia and hypertriglyceridemia.<sup>5</sup>

Xanthelasma before the age of 40 is most likely associated with familial hypercholesterolemia. The prevalence is higher among females than in males. The occurrence of Xanthelasma also increases with age. This patient's lipid profile was as follows: Total Cholesterol: 6.61 mmol/L, Triglycerides: 2.51mmol/L, HDL: 0.8 mmol/L, and LDL: 4.7mmol/L. Her thyroid-stimulating hormone (TSH) was 1.67miu/L, which is normal. She had hypercholesterolemia with hypertriglyceridemia and a low HDL level. She was prescribed simvastatin 20 mg, to be taken at night. For the management of her XP, she underwent cryotherapy treatment using trichloroacetic acid (TCA). TCA 30% was used for the first 2 visits, spaced 3 weeks apart. The concentration level of TCA was increased to 50% at the 3rd visit which was also 3 weeks apart. During the follow-up after the 3rd visit, the patient showed 40% improvement. Even though the patient had not fully recovered, she was satisfied with the treatment. In general, if a lesion is successfully removed, the patient needs to be informed of the possibility of recurrence and the side effect of the treatment, such as scarring even though it is very rare.

The other important management approach for this patient is to have regular cardiovascular screenings, as scheduled by the Ministry of Health, and monitoring of her lipid profile needs to continue to be improved with anti-lipid medications.

### How does this paper make a difference to general practice?

- This paper highlights that, although xanthelasma palpebrarum is common, medical officers should know how to construct a management plan and make patients aware of the treatment options, even if some treatments are for cosmetic purposes.

**References**

1. Rohrich RJ, Janis JE, Pownell PH. Xanthelasma palpebrarum: A review and current management principles. *Plast Reconstr Surg.* 2002;110(5):1310-4.
2. Fujita M, Shirai K. A comparative study of the therapeutic effect of probucol and pravastatin on xanthelasma. *J. Dermatol.* 1996;23(9):598-602.
3. Cannon P, Ajit R, Leatherbarrow B. Efficacy of trichloroacetic acid (95%) in the management of xanthelasma palpebrarum. *Clin. Exp. Dermatol.* 2010;35(8):845-8.
4. Ribera M, Pintó X, Argimon JM, Fiol C, Pujol R, Ferrándiz C. Lipid metabolism and apolipoprotein E phenotypes in patients with xanthelasma. *Am. J. Med.* 1995;99(5):485-90.
5. Kavoussi H, Ebrahimi A, Rezaei M, Ramezani M, Najafi B, Kavoussi R. Serum lipid profile and clinical characteristics of patients with xanthelasma palpebrarum. *An. Bras. Dermatol.* 2016;91(4):468-71.
6. Sharma P, Patgiri D, Sharma G, Pathak M. Serum lipid profile in Xanthelasma palpebrum. *Indian J Basic Appl Med Res.* 2013;7:732-7.
7. Segal P, Insull Jr W, Chambless LE, Stinnett S, Larosa JC, Weissfeld L, et al. The association of dyslipoproteinemia with corneal arcus and xanthelasma. The Lipid Research Clinics Program Prevalence Study. *Circulation.* 1986;73(1 Pt 2):1108-18.