Multiple papular lesions in a patient with HIV and/or AIDS and coinfected with hepatitis B virus: Amyloidosis

Introduction
The most common form of systemic amyloidosis is amyloid A induced by a chronic inflammation. In HIV-infected patients, elevated serum amyloid A levels might be associated with chronic inflammation.

Patient presentation
A 43-year-old male patient was admitted to hospital with a complaint of papular lesions around his eyes, existing for four months. The patient is receiving antiretroviral therapy. HIV RNA was undetectable, and the CD4 count was 770 cells/mm³. He suffered from a bladder carcinoma for four years. On examination, perioral, perioral and anogenital papules, papular lesions in the meatus of external auditory canal, and intranasal polyps were observed.

Management
Microscopic examination of the biopsy material taken from the perioral lesion and then from perianal polyps revealed eosinophilic deposition, and stained positively by Congo red. Serum amyloid A level was negative. Antiretroviral therapy was continued.

Conclusion
A rare form of amyloidosis in a patient with HIV and/or AIDS and coinfected with hepatitis B virus (HBV) was presented here with cutaneous and mucosal lesions.
lesion in 2014 and from the perianal polyp in 2016. Histopathologic examination revealed eosinophilic deposition in the tissues and a positive staining with Congo red showing amorphous eosinophilic deposition (Figure 2). Apple green birefringence was visualised under polarised light. Serum amyloid A level was negative. Renal biopsy could not be performed because the patient refused the procedure. HIV RNA was undetectable (< 20 copies/mL), and the CD4 count was 770 cell/mm$^3$. The patient is currently receiving an antiretroviral regimen consisting of dolutegavir and lamivudine, and additional oral colchicine therapy.

**Ethical considerations**

Verbal and written consent were taken from the patient for his clinical presentation and outcome. The case report was also approved by Erciyes University Local Ethics Committee (no: 352/2017).

**Discussion**

Serum amyloid A is an acute-phase protein produced by the liver and it is related to high-density lipoprotein particles.$^1$ One cause of systemic inflammation may be mitochondrial dysfunction, which is induced by nucleoside reverse transcriptase inhibitors.$^6$ Amyloid may be induced by chronic inflammation and cancer.$^1$ The presented case had HIV infection and HBV coinfection since 2004 and bladder carcinoma since 2011. Either of these might lead to secondary amyloidosis. A limited number of cases have been reported of secondary amyloidosis in HIV patients who had nephrotic syndrome.$^7$ In this case, renal biopsy could not be performed because the patient refused the biopsy. The most common clinical presentation of amyloidosis is related to renal
disease, which includes nephritic syndrome.\textsuperscript{3,7,8} Although this patient had nephrotic renal disease with proteinuria of 3 g/day; however, the patient’s main presenting complaint was related to cutaneous involvement periocular, intranasal and perioral papules.

\textbf{Conclusion}

In conclusion, unusual presentations of amyloidosis with multiple cutaneous involvement may be seen in HIV patients especially complicated with cancer and HBV coinfection.

\textbf{Acknowledgements}

\textbf{Competing interests}

All authors declare that there is no conflict of interest. The authors further declare that they have no financial or personal relationship which may have inappropriately influenced them in writing this article. This research received no specific grant from any funding agency in the public, commercial or not-for-profit sectors.

\textbf{Authors’ contributions}

All three authors were involved in preparing, follow-up and writing of the article. H.D. and M.D. were involved in redacting of the article.

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\[\text{FIGURE 2: Photomicrograph showing typical amorphous extracellular Congo red–positive amyloid deposition within the dermis (Congo red, x100).}\]