An unusual guest in a patient with Hodgkin's lymphoma

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DESCRIPTION

A 42-year-old man with chronic intermittent low grade fever and rapidly progressive right cervical swelling was evaluated in the outpatient clinic. The swelling involved the right level III, IV and V cervical region measuring 10x6x3 cm. Fine needle aspiration from the mass revealed many Reed-Sternberg cells and monolobated Hodgkin's cells (figure 1) which were positive for CD15 and CD30 on immunocytochemical analysis of the cell block material; this was further confirmed on excision biopsy of the lymph nodal mass. Bone marrow (BM) aspiration and trephine biopsy were performed as a part of lymphoma staging. Many sheathed microfilariae of *Wuchereria bancrofti* with a tapering tail free of cell nuclei were seen in the BM aspiration smears; some of these microfilariae were observed to be in

close contact with the BM particles (figure 2). Trilineage haematopoiesis without eosinophilia or any evidence of infiltration by Hodgkin's lymphoma was observed. Retrospectively, the peripheral blood film also showed occasional circulating microfilariae. On being diagnosed with microfilaraemia, the patient was administered diethylcarbamazine (DEC) 6 mg/kg/day for 14 days in the hospital anticipating adverse reactions. However, the patient tolerated DEC well without any complications. Subsequently, he was administered the first dose of adriamycin, bleomycin, vinblastine and dacarbazine (ABVD) chemotherapy without any complications and was discharged. On follow-up in the outpatient department, the patient has received a total of four doses of ABVD until now and the interim positron emission tomography (PET) scan shows that the disease is in complete remission. The plan is to give him a total six cycles of ABVD in view of Ann Arbor stage IIIB lymphoma observed at baseline.

Microfilariae are very rarely seen in the BM.¹⁻³ Migration from blood to BM by penetration of the vessel walls or entrapment in the BM during circulation could be a possible explanation.³ The absence of a clinical suspicion of filariasis, absence of eosinophilia and microfilariae in the BM with co-existing nodal Hodgkin's lymphoma make this case unique.

Figure 1 H&E stained preparation showing Reed-Sternberg cells along with lymphocytes in the background (400x).

Figure 2 Bone marrow aspirate smear showing microfilaria of *Wuchereria bancrofti* (May Grunwald Giemsa, 400x).

Learning points

- ▶ Unusual diseases can co-exist with the disease under investigation with an uncommon mode/site of presentation.
- ▶ Coincidental findings benefit patient care and teach us to be alert and have a broader mind while evaluating a particular case.

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