

CORRESPONDENCE

Chronic Myeloid Leukemia Presenting with Fleeting Facial Nerve Palsy

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Dear Editor,

A 24-year-old lady with no previous comorbidities presented with facial asymmetry and difficulty in closing her left eye for 1 week. There was no history of trauma, fever, skin lesion or associated pain. She gave a history of two episodes of similar illness involving right side of her face in last 4 months. On each occasion, she was diagnosed as a case of ‘Bell’s Palsy’ and treated with prednisolone (1 mg/kg for 14 days and then tapered), and she had symptomatically improved. After 4 months of the first episode, now she developed left side LMN palsy of VII cranial nerve (Fig. 1). She also had pallor and massive splenomegaly (10 cm below costal margin). Her blood investigation showed leukocytosis ($110 \times 10^9/L$) with left shift. Bone marrow showed 34% anti-MPO negative blasts with BCR-ABL1 transcript positivity on RT-PCR. Her cerebrospinal fluid (CSF) examination showed lymphoid blasts (Fig. 2). She was diagnosed as a case of chronic myeloid leukemia blast crisis (CML-BC). She received Dasatinib 140 mg daily along with dexamethasone and vincristine. Following the induction therapy with Dasatinib, vincristine and dexamethasone, her bone marrow after 4 weeks was in



Fig. 1 Clinical photograph showing lower motor neuron type left facial nerve palsy

remission. Three-months later she underwent matched sibling donor hematopoietic stem cell transplant. Six-month on follow-up, she is asymptomatic, in complete molecular remission and her facial asymmetry has near complete resolution (Fig. 3).

Central nervous system (CNS) involvement in blast phase of CML presents with features like headache, vomiting, visual blurring, and cranial nerve palsy [1, 2]. The commonest cranial nerve involved is seventh but third and sixth cranial nerve involvement has also been reported [3, 4]. However, CML presenting with fleeting bilateral facial nerve palsy as the isolated presentation is very

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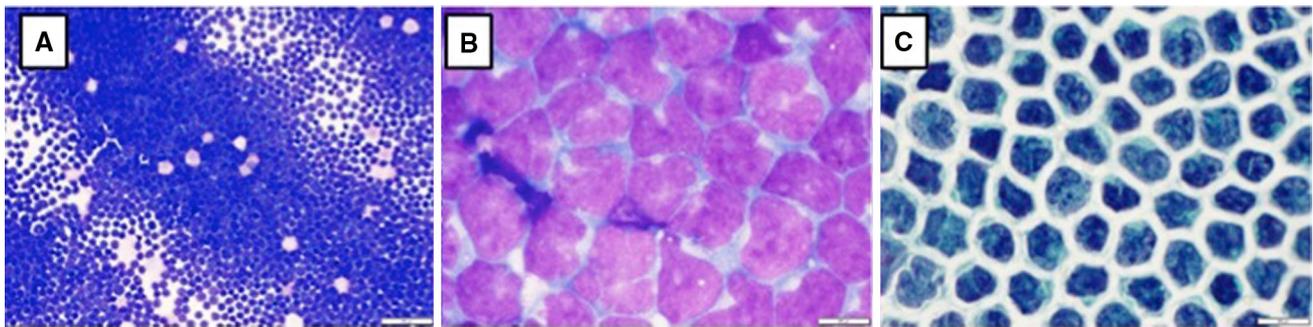


Fig. 2 a CSF cytospin smear showing high cellularity with sheets of atypical lymphoid cells (MGG; $\times 4$). b, c Higher magnification showing the large lymphoid blasts which are 2–3.5 times the size of a

mature lymphocyte with high nuclear cytoplasmic ratio, opened up chromatin, prominent nucleoli and scanty agranular cytoplasm (b MGG; $\times 100$; c Papanicolaou, $\times 40$)



Fig. 3 Clinical photograph after 6 months of allogeneic stem cell transplant showing near complete resolution of left facial nerve palsy

unusual. Our patient was receiving corticosteroids and never underwent blood investigation and these may be responsible for late diagnosis. The diagnosis of CNS involvement may be suspected clinically or on radiological imaging studies but requires demonstration of blast cells in CSF for confirmation [1–4]. BCR-ABL transcript has also been demonstrated in CSF and when available may add to the diagnosis [5]. These patients are treated with tyrosine kinase inhibitors (preferably dasatinib due to its better CNS penetration) along with chemotherapy but have poor response and require allogeneic stem cell transplant for long-term remission and cure [6, 7].

Compliance with Ethical Standards

Conflict of interest There is no conflict of interest between the authors.

Informed Consent Informed signed written consent was taken from the patient involved.

Ethical Approval All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Human and Animals Rights No animals were involved in the study.

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