AN UNUSUAL PRESENTATION OF ACUTE PARAPARESIS IN A PATIENT WITH ACUTE LYMPHOBLASTIC LEUKAEMIA AND METASTATIC RECTAL ADENOCARCINOMA

Nicholas Aw Shao Jiun[1],Lim Han Sim[2],Zairul Anuar Kamarul Bahrin[2]
[1]Universiti Kebangsaan Malaysia,[2]Hospital Pulau Pinang

Introduction: Acute lymphoblastic leukaemia (ALL) can present with acute paraplegia, very rarely as a first presentation1 or during a relapse2-3, arising from the uncommon manifestation of extradural spinal metastases. Most cases are referred to Orthopaedics for lower back pain associated with acute lower limb weakness, before the underlying cause is discovered. A diagnostic dilemma arises when that rare patient with multiple primaries presents.

Discussion: A sixty-six year-old female presented with acute bilateral lower limb weakness of three weeks, preceded by a three-month history of lumbar night pain and bilateral sciatica not exacerbated by movement or position. She had been diagnosed with B-ALL (precursor B-cell ALL) two years ago and was in remission after chemotherapy. During that period, rectal adenocarcinoma with liver metastasis was discovered due to her persistent anaemia, for which she underwent a curative anterior resection, cholecystectomy and hepatectomy. Subsequent follow-ups showed no relapse nor metastasis of either cancer. Examination elicited bony tenderness over the lumbar spine whilst neurological examination found her to be paraplegic, absent abdominal reflexes, areflexic deep tendon reflexes, bilaterally equivocal Babinski reflexes, ASIA Grade C. However, sensation was preserved. Plain radiographs were unremarkable aside from degenerative spine disease. MRI showed extradural hyperintense soft tissue mass compressing the spinal cord from T10 to L5, with impingement of bilateral exiting nerve roots. In view of poor prognostic factors, a multidisciplinary approach involving Haematology and Oncology suggested radiotherapy. B-ALL are chemoradiosensitive1 tumours uncommonly manifesting as spinal extradural masses, with lepto-meningeal relapse being more common2. Operative removal faces a high risk of intra-operative haemorrhage, and infection with consequent mortality.

Conclusion: Surgical decompression for the unusual presentation of extradural spinal chemo-radiosensitive B-ALL should be individually tailored via a multidisciplinary approach.