

Positron emission tomography–computed tomography as a monitoring response tool in pre-fibrotic myelofibrosis: A case report

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Primary myelofibrosis is a haematopoietic stem cell neoplasm resulting in ineffective haematopoiesis and bone marrow fibrosis. We present a case of a 67-year-old male patient who came to the oncology/haematology department of Dr. Ziauddin Hospital, Karachi, in February 2020 with complaints of weight loss, gastroesophageal reflux and loss of appetite. Examination revealed splenomegaly and initial workup demonstrated bicytopenia on complete blood picture. Bone marrow biopsy was consistent with pre-fibrotic myelofibrosis (Janus Kinase 2 (JAK-2) positive). He was categorized as intermediate-2 risk according to Dynamic International Prognostic Scoring System (DIPPS) with score of 3 and was advised to start JAK-1/JAK-2 inhibitors. Prior to therapy, he underwent Positron Emission Tomography-Computed Tomography (PET/CT) scan which showed increased Fluorodeoxyglucose (FDG) uptake in the spleen and bone marrow. Monitoring by the scan after initiating treatment demonstrated decreased FDG uptake in bone marrow and spleen, demonstrating that PET/CT is a non-invasive way to assess and monitor treatment response in pre-fibrotic myelofibrosis.

Biography

Amna has done her MBBS in 2010 from Dow University of Health Sciences and FCPS (Hematology) in 2018 from Dr. Ziauddin University Hospital. Since 2018 She have been serving in the department of Hematology/Oncology diagnosing and treating a number of benign and malignant disorder including nutritional deficiencies, acute leukemia, chronic leukemia, lymphoma, hemoglobinopathy, inherited bone marrow failure syndromes, coagulopathies, transfusion related problems, thrombophilia etc. She is dealing with chemo-immunotherapies. She worked on rare blood groups. Her research is on bcr-abl positivity frequency in childhood B-ALL, GERD etc.

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