Characterization and management of synchronous dual hematological malignancies

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Characterization and management of patients with a synchronous dual hematological malignancy (SDHM) is not well described. In our database, we identified 41 patients with clonally unrelated SDHM, a prevalence of 1.35%, median age 75 years (23-90) and male predominance. 31.7% had concomitant solid cancers, suggesting increased susceptibility to SDHM or impaired immunity. Referrals from general practitioners were for a general diagnosis (65%) or for a non-specific symptom (35%). With referrals from specialists only asymptomatic secondary diagnoses were missed. SDHMs were diagnosed incidentally or because of discordance in clinical/laboratory findings. Three combinations of SDHMs were identified. In the myeloid+lymphoid group, concomitant MGUS was most frequent. Within the lymphoid+lymphoid group, SDHM combinations were random. There were only three myeloid+myeloid SDHMs. 70.7% required therapy for primary malignancy, 29.3% needed active surveillance. For a secondary diagnosis, 70.7% patients were actively monitored, and 29.3% needed treatment. At the completion of treatment for primary malignancy, 90% were either in remission/non-progressing disease or 10% progressed. Overall SDHM survival was 82.9% vs. 87.2% of control. Our management experience of SDHM is following: Have low threshold for intensive investigations if there are discordant data; patients with low-grade/low-acuity SDHM can be on active surveillance with early re-evaluation of both diseases if conditions change; if two malignancies require treatment, aim therapy at the more aggressive one; ABVD chemotherapy completely resolves cutaneous T-cell lymphoma lesions; cladribine has no effect on concomitant chronic myelomonocytic leukemia; ruxolitinib precipitates chronic lymphocytic leukemia; hydroxyurea decreases M-spikes in MGUS, regardless of type; azacitidine improves mast cell leukemia, bone marrow fibrosis, but has no effect on follicular lymphoma and; phlebotomized patients with polycythemia vera may develop profound anemia on chemotherapy, requiring holding phlebotomies, IV iron, erythropoietin-stimulating agents/red cell transfusions. Further studies of SDHM, exploring different cohorts and ethnicities, are needed.

Biography
Rouslan Kotchetkov has completed his MD in 1994 at Minsk University, Belarus and PhD in 1998 at Frankfurt University, Germany. After re-training at Queens University, he acknowledged his MD degree in Ontario in 2007, followed by Post-gradual training in Internal Medicine at McMaster University, Adult Hematology at University of Toronto, and fellowship in Mature Lymphoproliferative Disorders and Lymphoma at Princess Margaret Cancer Center. Since July 2013, he is a staff Hematologist-Oncologist at Simcoe Muskoka Regional Cancer Program. He is an Assistant Professor of Medicine at University of Toronto. He has published over 50 papers and has 40 oral and 12 poster presentations at scientific conferences.