MS is typically diagnosed based upon pathologic and immunophenotypic features that are consistent with a high-grade hematopoietic neoplasm consisting of myeloblasts with or without features of promyelocytic or neutrophilic maturation with the expression of MPO or other markers of myeloid differentiation.[11] It is important to distinguish MS from lymphoma or other tumors. In immunohistochemistry, CD68/KP1 is the most commonly expressed marker, followed by MPO, CD117, CD99, lysozyme, CD34, Tdt, CD56, CD61, CD30, glycophorin and CD4.[5] The literature has reported varied cytogenetic abnormities in myeloid sarcomas, such as the inversion of chromosome 16 and its associated molecular genetic change resulting in the core binding factor β/myosin, heavy chain 11, smooth muscle (CBFβ/MYH11) fusion gene.[13] The differential diagnosis of myeloid sarcoma includes Non-Hodgkin's lymphoma (NHL), Ewing's sarcoma or other primitive neuroectodermal tumors. The correct diagnosis of myeloid sarcoma could be made with careful observation of morphological features along with immunohistochemical staning.[14] The prognosis of patients with myeloid sarcoma is extremely poor and the majority succumb to the disease within a short time. Few patients experience long complete remission periods after effective treatments. Untreated primary myeloid sarcoma ultimately transforms to AML usually within 10 months of the diagnosis of myeloid sarcoma. However, in rare instances, cases have been reported in which transformation to leukemia has not occurred in a follow-up time of >16 years.[1] Chemotherapy and stem cell transplantation are the treatment of choice with or without surgery or radiotherapy.[8] However, surgical resection and local radiotherapy cannot delay the transformation from myeloid sarcoma to AML or improve the prognosis.[1,15] This indicates that primary myeloid sarcoma is a type of systemic disease that consequently requires systemic treatment. Systemic chemotherapy is indicated for all solitary myeloid sarcomas, even if surgical resections have been performed. The present hypothesis is that the application of anti-leukemia chemotherapy soon after surgery is useful for controlling the development of the disease and improving the prognosis. The preferred regimen uses anthracyclines combined with cytarabine. Allogeneic hematopoietic stem cell transplantation could also be an effective treatment for myeloid sarcoma.[1]

CONCLUSION

Myeloid sarcoma is a malignant hematolymphoid neoplasm of myeloid origin that could develop in any area of the body. Myeloid sarcoma derived from the gastrointestinal tract is relatively rare and tends to be misdiagnosed. Because of its different localization, symptoms, and the lack of diagnostics algorithm, myeloid sarcoma is a real diagnostic challenge, especially in patients without initial bone marrow