Abstract
Background: Plan to illustrate how to care for patients with Acute Leukemia, with a history of Li-Fraumeni Syndrome from the TP53 mutation. There will be discussion about a newly diagnosed patient with Leukemia and his journey dealing with Li-Fraumeni Syndrome.

Objective: The goal is to provide the audience with education about Li-Fraumeni Syndrome. Plan to focus on ordering the appropriate diagnostic testing and promote strategies that will aid in the care of Li-Fraumeni patients.

Methods: The case study was conducted on a 25-year-old male diagnosed with Li-Fraumeni Syndrome and the TP53 mutation was found upon performance of diagnostic testing. The plan is to further demonstrate how the patient was diagnosed with Leukemia and what measures that are being taken to care for him and eventually put the patient into remission.

Results: Li-Fraumeni Syndrome affects 1 in 5000 live births worldwide. These patients have a high probability of developing a wide spectrum of childhood and adult-onset malignancies. This can result in 50% risk of cancer by age 30 and 80% risk of cancer by age 70.

Conclusion: The outcome is to help readers understand how patients diagnosed with Li-Fraumeni Syndrome with TP53 mutation are at higher risk of developing cancers such as Sarcoma, Breast, and Adrenal Gland Syndromes. Adrenal Gland Syndrome.

Historical perspective: It was named after two American physicians, Frederick Pei Li and Joseph F. Fraumeni, Jr, who first recognized the syndrome after reviewing the medical records and death of 60 children with Rhabdomyosarcoma patients. The syndrome is linked to germline mutations of the TP3 tumor suppressor gene. If a patient has this gene mutation they are at a higher risk of developing Sarcoma, Breast Cancer, Leukemia and Adrenal Gland Syndrome.

The risk of developing cancer in individual with TP53 mutation estimated to 50% by age 30 years and 90% by age 60 years. Lifetime risk of cancer is up to 90% Leukemia, lung cancer, colon cancer and melanoma are frequently seen in Li-Fraumeni Syndrome.

Clinical Information
The classical LFS malignancies - sarcoma, cancers of the breast, brain, and adrenal glands - comprise about 80% of all cancers that occur in this syndrome. The risk of developing any invasive cancer (excluding skin cancer) is about 50% by age 30 (1% in the general population) and 90% by age 70. Early-onset breast cancer accounts for 25% of all the cancers in this syndrome. This is followed by soft-tissue sarcomas (20%), bone sarcoma (15%), and brain tumors - especially glioblastoma - (13%). Other tumors seen in this syndrome include leukemia, lymphoma and adrenocortical carcinoma.

Recommendations and Management
Management of Li-Fraumeni
Genetic counseling and genetic testing are used to confirm that this person has this gene mutation. Once identified with Li-Fraumeni, early and regular screening for cancer are recommended. The patient with Li-Fraumeni are likely to develop another primary malignancy in the future 5-7% within 30 years of diagnosis.

Plan: Lead Clinic referral for surveillance which includes biannual clinic visits with Whole body MRI and Brain MRI. GI evaluation - EG D and Colonoscopy every 2-5 years, neurology exam and annual dermatology appointment. Plans to continue to follow up with the patient in clinic every 6-12 months.

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