A Woman with Extreme Fatigue

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A 23 year old female presented to her primary care provider's office complaining of extreme fatigue over the past few weeks.

The patient's past medical history is significant for stage 2B Hodgkin's lymphoma, diagnosed 2 years ago. The patient received 4 cycles of chemotherapy with ABVD, as well as multiple rounds of radiation therapy. Upon completion of treatment, her Hodgkin's was considered cured. The patient did develop hypothyroidism secondary to the radiation treatments, and requires permanent thyroid hormone replacement.

Four weeks prior to presentation, the patient noted the onset of her symptoms. She stated that she has been taking a lot of naps throughout the day, which is unusual for her. She denied fevers, chills, night sweats, changes in weight, or viral illnesses over this time.

At her primary care physician's office, the patient was found to have elevated LFT's. (Table 1)

Table 1. **Outpatient Laboratory Values**

	4 weeks prior to admission	1 week prior to admission
Total protein	6.2	-
Albumin	3.2	2.9
Total bilirubin	1.2	2.6
Direct bilirubin	-	-
AST	149	152
ALT	-	198
Alkaline phosphatase	182	158

The patient was referred to a gastroenterologist for evaluation and work-up. She began to develop visible jaundice, generalized pruritus, and dark urine, without fevers, abdominal pain, nausea, vomiting, or pale stools. She was subsequently hospitalized for further work-up.

On review of systems, the patient denies chest pain, shortness of breath, lymphadenopathy, diarrhea, constipation, myalgias, joint pains, or changes in her menstrual cycle. Her medications include levothyroxine and Depo-provera injections for birth control. She has used tobacco for the past 8 years, less than one-half pack of cigarettes per day, and consumes about 5 beers over 1 weekend per month. She denies any IVDA or recreational drug use. The patient has one tattoo, dating about 8 years. She is sexually active in a monogamous relationship and her partner uses condoms.

Her vitals on presentation follow: blood pressure 126/78 mm Hg, heart rate 82, respirations 16, and temperature 98.6. The patient appears her stated age, and is in no apparent distress. Sclerae are anicteric, and conjunctivae pink. No oropharyngeal exudates or apthous ulcers are seen, and there is no evidence of cervical, axillary, supraclavicular, or inguinal lymphadenopathy. Thyroid is not enlarged or tender. Cardiac exam is normal and her lungs are clear. Her abdomen is mildly obese, nontender and nondistended, with normoactive bowel sounds. There is no hepatosplenomegaly. No peripheral edema or joint abnormalities are appreciated, and she is neurologically intact.

Dermatologic exam is notable for generalized jaundice.

Admission laboratory data is listed in Table 2.

Table 2. **Laboratory Values Upon Admission**

Na	140	Hep B surface antigen	Negative
K	3.5	Hep B core antibody	Negative
Cl	109	Hep B surface antibody	Negative
CO2	27	Hep C antibody	Negative
BUN	10	AMA	Negative
Cr	.9	ANA	Negative
Wbc	5.0	Ceruloplasmin	6.0
Hgb	9.4*	Iron	122
MCV	109	TIBC	127
Plts	124	Iron saturation	96%
Total protein	5.6	Ferritin	1030
Albumin	2.5	Reticulocytes	15.1
Total bilirubin	10.9	Absolute reticulocyte count	110.9
Direct bilirubin	4.3	LDH	189
AST	95	B12	1242
ALT	30	Folate	13.4
Alkaline phosphatase	33	Haptoglobin	< 6.0
PT	21.0	TSH	3.69
INR	1.82		
PTT	43		
Hep A IgM/IgG	Negative		

**Hgb was 14.4 approximately 1 year ago.*

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