REASON FOR VISIT:, The patient presents for a followup for history of erythema nodosum.,HISTORY OF PRESENT ILLNESS: , This is a 25-year-old woman who is attending psychology classes. She was diagnosed with presumptive erythema nodosum in 2004 based on a biopsy consistent with erythema nodosum, but not entirely specific back in Netherlands. At that point, she had undergone workup which was extensive for secondary diseases associated with erythema nodosum. Part of her workup included a colonoscopy. The findings were equivocal characterizes not clearly abnormal biopsies of the terminal ileum.,The skin biopsy, in particular, mentions some fibrosis, basal proliferation, and inflammatory cells in the subcutis.,Prior to the onset of her erythema nodosum, she had a tibia-fibula fracture several years before on the right, which was not temporarily associated with the skin lesions, which are present in both legs anyway. Even, a jaw cosmetic surgery she underwent was long before she started developing her skin lesions. She was seen in our clinic and by Dermatology on several occasions. Apart from the first couple of visits when she presented stating a recurrent skin rash with a description suggestive of erythema nodosum in the lower extremities and ankle and there is discomfort pointing towards a possible inflammatory arthritis and an initial high sed rate of above 110 with an increased CRP. In the following visits, no evident abnormality has been detected. In the first visit, here some MTP discomfort detected. It was thought that erythema nodosum may be present. However, the evaluation of

Dermatology did not concur and it was thought that the patient had venous stasis, which could be related to her prior fracture. When she was initially seen here, a suspicion of IBD, sarcoid inflammatory arthropathy, and lupus was raised. She had an equivocal rheumatoid fracture, but her CCP was negative. She had an ANA, which was positive at 1:40 with a speckled pattern persistently, but the rest of the lupus serologies including double-stranded DNA, RNP, Smith, Ro, La were negative. Her cardiolipin panel antibodies were negative as well. We followed the IgM, IgG, and IgA being less than 10. However, she did have a beta-2 glycoprotein 1 or an RVVT tested and this may be important since she has a livedo pattern. It was thought that the onset of lupus may be the case. It was thought that rheumatoid arthritis could not be the case since it is not associated with erythema nodosum. For the fear of possible lymphoma, she underwent CT of the chest, abdomen, and pelvis. It was done also in order to rule out sarcoid and the result was unremarkable. Based on some changes in her bowel habits and evidence of B12 deficiency with a high methylmalonic and high homocystine levels along with a low normal B12 in addition to iron studies consistent with iron deficiency and an initially low MCV, the possibility of inflammatory bowel disease was employed. The patient underwent an initially unrevealing colonoscopy and a capsule endoscopy, which was normal. A second colonoscopy was done recently and microscopically no evidence of inflammatory bowel disease was seen. However, eosinophil aggregations were noted in microscopy and this was told to

be consistent with an allergic reaction or an emerging Crohn disease and I will need to discuss with Gastroenterology what is the significance of that. Her possible B12 deficiency and iron deficiency were never addressed during her stay here in the United States.,In the initial appointment, she was placed on prednisone 40 mg, which was gradually titrated down this led to an exacerbation of her acne. We decided to take her off prednisone due to adverse effects and start her on colchicine 0.6 mg daily. While this kept things under control with the inflammatory markers being positive and no overt episodes of erythema nodosum, the patient still complains for sensitivity with less suspicious skin rash in the lower extremities and occasional ankle swelling and pain. She was reevaluated by Dermatology for that and no evidence of erythema nodosum was felt to be present. Out plan was to proceed with a DEXA scan, at some point check a vitamin D level, and order vitamin D and calcium over the counter for bone protection purposes. However, the later was deferred until we have resolved the situation and find out what is the underlying cause of her disease.,Her past medical history apart from the tibia-fibular fracture and the jaw cosmetic surgery is significant for varicella and mononucleosis.,Her physical examination had shown consistently diffuse periarticular ankle edema and also venous stasis changes at least until I took over her care last August. I have not been able to detect any erythema nodosum, however, a livedo pattern has been detected consistently. She also has evidence of acne, which does not seem to be present at the moment. She also was found to

have a heart murmur present and we are going to proceed with an echocardiogram placed.,Her workup during the initial appointment included an ACE level, which was normal. She also had a rather higher sed rate up to 30, but prior to that, per report, it was even higher, above 110. Her RVVT was normal, her rheumatoid factor was negative. Her ANA was 1:40, speckled pattern. The double-stranded DNA was negative. Her RNP and Smith were negative as well. RO and LA were negative and cardiolipin antibodies were negative as well. A urinalysis at the moment was completely normal. A CRP was 2.3 in the initial appointment, which was high. A CCP was negative. Her CBC had shown microcytosis and hypochromia with a hematocrit of 37.7. This improved later without any evidence of hypochromia, microcytosis or anemia with a hematocrit of 40.3.,The patient returns here today, as I mentioned, complaining of milder bouts of skin rash, which she calls erythema nodosum, which is accompanied by arthralgias, especially in the ankles. I am mentioning here that photosensitivity rash was mentioned in the past. She tells me that she had it twice back in Europe after skiing where her whole face was swollen. Her acne has been very stable after she was taken off prednisone and was started on colchicine 0.6 daily. Today we discussed about the effect of colchicine on a possible pregnancy.,MEDICATIONS: , Prednisone was stopped. Vitamin D and calcium over the counter, we need to verify that. Colchicine 0.6 mg daily which we are going to stop, ranitidine 150 mg as needed, which she does not take frequently.,FINDINGS:, On physical examination, she is very

pleasant, alert, and oriented x 3 and not in any acute distress. There is some evidence of faint subcutaneous lesions in both shins bilaterally, but with mild tenderness, but no evidence of classic erythema nodosum. Stasis dermatitis changes in both lower extremities present. Mild livedo reticularis is present as well.,There is some periarticular ankle edema as well. Laboratory data from 04/23/07, show a normal complete metabolic profile with a creatinine of 0.7, a CBC with a white count of 7880, hematocrit of 40.3, and platelets of 228. Her microcytosis and hypochromia has resolved. Her serum electrophoresis does not show a monoclonal abnormality. Her vitamin D levels were 26, which suggests some mild insufficiency and she would probably benefit by vitamin D supplementation. This points again towards some ileum pathology. Her ANCA B and C were negative. Her PF3 and MPO were unremarkable. Her endomysial antibodies were negative. Her sed rate at this time were 19. The highest has been 30, but prior to her appointment here was even higher. Her ANA continues to be positive with a titer of 1:40, speckled pattern. Her double-stranded DNA is negative. Her serum immunofixation confirmed the absence of monoclonal abnormality. Her urine immunofixation was not performed. Her IgG, IgA, and IgM levels are normal. Her IgE levels are normal as well. A urinalysis was not performed this time. Her CRP is 0.4. Her tissue transglutaminase antibodies are negative. Her ASCA is normal and anti-OmpC was not tested. Gliadin antibodies IgA is 12, which is in the borderline to be considered equivocal, but these are nonspecific. I am

reminding here that her homocystine levels have been 15.7, slightly higher, and that her methylmalonic acid was 385, which is obviously abnormal. Her B12 levels were 216, which is rather low possibly indicating a B12 deficiency. Her iron studies showed a ferritin of 15, a saturation of 9%, and an iron of 30. Her TIBC was 345 pointing towards an iron deficiency anemia. I am reminding you that her ACE levels in the past were normal and that she has a microcytosis. Her radiologic workup including a thoracic, abdominal, and pelvic CT did not show any suspicious adenopathy, but only small aortocaval and periaortic nodes, the largest being 8 mm in short axis, likely reactive. Her pelvic ultrasound showed normal uterus adnexa. Her bladder was normal as well. Subcentimeter inguinal nodes were found. There was no large lytic or sclerotic lesion noted. Her recent endoscopy was unremarkable, but the microscopy showed some eosinophil aggregation, which may be pointing towards allergy or an evolving Crohn disease. Her capsule endoscopy was limited secondary to rapid transit. There was only a tiny mucosal red spot in the proximal jejunum without active bleeding, 2 possible erosions were seen in the distal jejunum and proximal ileum. However, no significant inflammation or bleeding was seen and this could be small bowel crisis. Neither evidence of bleeding or inflammation were seen as well. Specifically, the terminal ileum appeared normal. Recent evaluation by a dermatologist did not verify the presence of erythema nodosum.,ASSESSMENT:, This is a 25-year-old woman diagnosed with presumptive erythema nodosum in

2004. She has been treated with prednisone as in the beginning she had also a wrist and ankle discomfort and high inflammatory markers. Since I took over her care, I have not seen a clear-cut erythema nodosum being present. No evidence of synovitis was there. Her serologies apart from an ANA of 1:40 were negative. She has a livedo pattern, which has been worrisome. The issue here was a possibility of inflammatory bowel disease based on deficiency in vitamin B12 as indicated by high methylmalonic and homocystine levels and also iron deficiency. She also has low vitamin D levels, which point towards terminal ileum pathology as well and she had a history of decreased MCV. We never received the x-ray of her hands which she had and she never had a DEXA scan. Lymphoma has been ruled out and we believe that inflammatory bowel disease, after repeated colonoscopies and the capsule endoscopy, has been ruled out as well. Sarcoid is probably not the case since the patient did not have any lymphadenopathies and her ACE levels were normal. We are going check a PPD to rule out tuberculosis. We are going to order an RVVT and glycoprotein beta-1 levels in her workup to make sure that an antiphospholipid syndrome is not present given the livedo pattern. An anti-intrinsic factor will be added as well. Her primary care physician needs to workup the possible B12 and iron deficiency and also the vitamin D deficiency. In the meanwhile, we feel that the patient should stop taking the colchicine and if she has a flare of her disease then she should present to her dermatologist and have the skin biopsy

performed in order to have a clear-cut answer of what is the nature of this skin rash. Regarding her heart murmur, we are going to proceed with an echocardiogram. A PPD should be placed as well. In her next appointment, we may fax a requisition for vitamin B replacement.,PROBLEMS/DIAGNOSES:, 1. Recurrent erythema nodosum with ankle and wrist discomfort, ? arthritis.,2. Iron deficiencies, according to iron studies.,3. Borderline B12 with increased methylmalonic acid and homocystine.,4. On chronic steroids; vitamin D and calcium is needed; she needs a DEXA scan.,5. Typical ANCA, per records, were not verified here. ANCA and ASCA were negative and the OmpC was not ordered.,6. Acne.,7. Recurrent arthralgia not present. Rheumatoid factor, CCP negative, ANA 1:40 speckled.,8. Livedo reticularis, beta 2-glycoprotein was not checked, we are going to check it today. Needs vaccination for influenza and pneumonia.,9. Vitamin D deficiency. She needs replacement with ergocalciferol, but this may point towards _____ pathology as this was not detected.,10. Recurrent ankle discomfort which necessitates ankle x-rays.,PLANS:, We can proceed with part of her workup here in clinic, PPD, echocardiogram, ankle x-rays, and anti-intrinsic factor antibodies. We can start repleting her vitamin D with _____ weeks of ergocalciferol 50,000 weekly. We can add an RVVT and glycoprotein to her workup in order to rule out any antiphospholipid syndrome. She should be taking vitamin D and calcium after the completion of vitamin D

replacement. She should be seen by her primary care physician, have the iron and B12 deficiency worked up. She should stop the colchicine and if the skin lesion recurs then she should be seen by her dermatologist. Based on the physical examination, we do not suspect that the patient has the presence of any other disease associated with erythema nodosum. We are going to add an amylase and lipase to evaluate her pancreatic function, RPR, HIV, _____ serologies. Given the evidence of possible malabsorption it may be significant to proceed with an upper endoscopy to rule out Whipple disease or celiac disease which can sometimes be associated with erythema nodosum. An anti-intrinsic factor would be added, as I mentioned. I doubt whether the patient has Behcet disease given the absence of oral or genital ulcers. She does not give a history of oral contraceptives or medications that could be related to erythema nodosum. She does not have any evidence of lupus _____ mycosis. Histoplasmosis coccidioidomycosis would be accompanied by other symptoms. Hodgkin disease has probably been ruled out with a CAT scan. However, we are going to add an LDH in future workup. I need to discuss with her primary care physician regarding the need for workup of her vitamin B12 deficiency and also with her gastroenterologist regarding the need for an upper endoscopy. The patient will return in 1 month.