Question » What can be done to reduce the number of sticks when inserting an IV into a vein?

I am a primary immunodeficiency (PI) patient who has been treated every two weeks with intravenous immune globulin (IVIG) for the past 22 months, and it takes three to six sticks for my nurses to get an IV into a viable vein. Even though I drink a lot of water, when the saline push starts, my vein blows up, and we have to start again. Is there anything I can do to keep this from happening? I asked my doctor if I could try infusing every three weeks to give my arms a chance to heal in between, but I know that's not a good reason to potentially put myself at risk to exposure of infections.

Abbie » I spoke with Roger Kobayashi, MD, regarding your question. He said, in general, indwelling ports should never be used in PI patients since they are associated with thrombosis, which can result in stroke and renal infarction, and they can occasionally become colonized and discharge septic emboli. Further, IVIG is typically given every four weeks or occasionally every three weeks, rather than every two weeks. Is there a reason you are receiving IVIG every two weeks, and has your doctor measured your IgG trough levels?

Because of the issues you are experiencing, you should discuss with your doctor switching to subcutaneous IG (SCIG), since there are rarely associated medical contraindications. With SCIG, there is no need to access a vein since the IG is infused via small needle sets just below the skin. SCIG is typically infused every week, with the total monthly dose divided by four. For instance, if you are treated with 30 grams per month with IVIG, you would be treated with 8 grams per week (rounded up), 10 grams every 10 days or 15 grams every two weeks with SCIG.

Question» Can a tumor marker be passed from a donor to a patient through an IVIG infusion?

My husband was recently told he has an autoimmune neuropathy, and he was prescribed 40 grams of intravenous immune globulin (IVIG) twice a week for two weeks and then once every other week for a total of 11 infusions. After his fourth infusion, his liver enzymes were elevating, so the treatment was stopped and he was sent to a liver specialist. The specialist performed blood work, and all tests came back normal except a tumor marker called CEA (carcinoembryonic antigen), which was super elevated at 19.4 (normal is 0 to 5, and anything over 10 is almost positive for metastasized cancer). Because of the normal blood tests, the specialist felt it was certain IVIG was the cause of his elevated liver enzymes. But, due to his elevated CEA, a chest CT scan, an MRI with and without contrast of the abdomen and pelvis, a PET scan and a colonoscopy were performed to look for cancer, but all were normal. The liver specialist said it's possible a CEA level of 19.4 could be normal for my husband, but he had never seen that. Therefore, it was hypothesized that a CEA tumor marker may have been passed on by a plasma donor through the IVIG infusion. My questions are: Have you ever heard of a tumor marker being passed through a plasma transfusion? And, if so, is there any possibility that this may develop into cancer in my husband?

Dr. Kobayashi » The answer is unequivocally no that CEA in high levels could be passed through IVIG or subcutaneous IG infusions, and there are no studies reporting this. It also would not be possible for the infusion of IVIG to cause cells to secrete CEA (which is an immunoglobulin superclass). Also, if a donor had an elevated CEA, it would be vastly diluted among the 5,000 to 50,000 other donors included in the batch that made up the IG solution. Further, noncancerous patients do not have a markedly elevated CEA [it can be positive in infections, rheumatoid diseases and pulmonary diseases, but not typically elevated].

CEA has poor sensitivity and is not recommended for cancer screening. This, then, raises the question of whether there was a reason for ordering the CEA test. The CEA tumor marker test is an old test that has been around since 1965 and is not used for screening. In my opinion, it would be prudent to follow the patient now that there is a positive result from a nonspecific test.

» *Have a question?* *Email us at editor@IGLiving.com. Your information will remain confidential unless permission is given.*

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