

Internal Medicine Second Opinion - Full Chart Review

Date: 2022-01-11

Patient: John Doe

Discussion:

I reviewed Mr. John Doe medical record which was provided to me. Mr. Doe is a veteran who served in the Army from 8/16/1990 to 5/10/1997. During Military service, he developed Asthma (Reactive Respiratory Disease in 1992) and multiple traumatic joint injuries that place him on restricted duty/limited activity for 508 days. This lack of activity and sedentary life style led to excessive weight gain, Metabolic Syndrome (Hypertension, Hyperlipidemia, Diabetes) and now Diabetic Neuropathy in hands and feet. Upon entry in the service, Mr. Doe BMI was 16.8%, he gained 68 pounds from 8/16/1990 to 3/19/1997. He was diagnosed with diabetes mellitus type 2, in 3/18/1998 just after leaving the Army and has been on metformin since then. He was given steroid for Reactive airway disease which also led to uncontrolled blood sugar. His HbA1c in Sept 2015 was 10.9 and in Nov 2016 was 9.9 which suggests blood sugar remains uncontrolled led to diabetic neuropathy which was diagnosed in October 2016. Symptoms related to diabetic neuropathy included paresthesias, numbness, burning pain; and managed with gabapentin.

Recommendations:

In patients with type 2 diabetes, the risk of diabetic complications like neuropathy, nephropathy and all micro and macro vascular complications are strongly associated with hyperglycemia. Any reduction in HbA1c is likely to reduce the risk of complications, with the lowest risk being in those with HbA1c values in the normal range (<6.0%). Obesity plays a major role, as weight increases, it's difficult to control blood sugar on metformin. Higher the blood sugar remains, more chance it may lead to micro and macro vascular complications including neuropathy which Mr. Doe already developed. Diabetes causes a wide variety of peripheral nerve problems. These can be divided into chronic neuropathies, of which distal symmetric polyneuropathy is the most common, and acute neuropathies, such as diabetic amyotrophy. There is growing evidence suggesting that prediabetic levels of hyperglycemia and other consequences of obesity and dyslipidemia contribute to neuropathy risk. Diabetic neuropathy is characterized by striking atrophy and loss of myelinated and unmyelinated fibers accompanied by Wallerian degeneration, segmental, and paranodal demyelination and blunted nerve fiber regeneration. This progressive nerve fiber damage and loss parallels the degree and/or duration of hyperglycemia.

The veteran's diabetes and its complications are more likely caused by lack of physical activities during military service and the veteran's diabetic neuropathy is more likely caused by his service-connected diabetes mellitus 2, as diabetic neuropathy is a common complication for patients with poor blood sugar control, as demonstrated by the patient's medical history. Weight gain is a single most independent risk factor for Diabetes

. Mr. Does weight was 218 lbs in 8/16/1990 and body fat percentage was measured at 16.80% body fat during entry at military service. His weight increases overtime from 218 lbs. in 8/16/1990 to 286 lbs. in 3/19/1997, representing a net weight gain of 68 lbs. Clearly this obesity manifested during military service and it's remained an issue at current date. Mr. Does obesity is directly connected to his military service, because it manifested in service.

References:

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