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Chronic Venous Insufficiency - Pandemic of Ignorance

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Chronic venous insufficiency (CVI) of lower extremities (LE) is a spectrum of symptoms and signs which results from venous reflux in the setting of venous hypertension. CVI causes pain, edema, skin and hair changes of the LE as well as ulcerations [1].

CVI is more common than perceived and more than 30 million American suffer one or the other form. Only 1.9 Million seek treatment annually while the remaining, remain undiagnosed and hence untreated, posing a healthcare economic burden on almost all societies of the world- developed and underdeveloped [2].

Majority of the primary care physicians do not recognize this condition [3]. However, on a comparative aspect, venous reflux disease is two times more prevalent than coronary artery disease (CAD) and five times more prevalent than peripheral arterial disease (PAD). This makes this condition worthy of more attention.

In our single center experience of more than two decades, we have seen, and managed the whole spectrum of venous insufficiencies and we have seen dramatic changes these treatments have brought in the lives of patients and their families - we now have a unique protocolized professional approach to the management of this class of vascular disease.

Earlier on, while ablation of varicose veins provided more promising result, around of 50% of these patients still had a recurrence or incomplete treatment. This led to the realization that superficial manifestations of venous reflux disease could be a tip of the iceberg. Further testing of the deep veins revealed a more advanced nature of the disease and this further unveiled the mystery behind lower extremity swelling in the setting of normal organ systems or more commonly described as "lower extremity swelling/edema with unknown cause".

We now know the details of May-Turner syndrome [4], which is the left iliac vein compression due to the overlying anatomic structures in the pelvic region, and therefore, while this is considered to be the disease of congenital origin and more so that of female gender. However, I believe everyone, irrespective of the age, sex and family history is exposed.

I also believe that Mary-Turner physiology could also develop in an acquired fashion, and in that capacity I would say that any amount of compression, angulation, indentation, approximation of the iliac veins in the pelvic

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region from their land mark origin at the inguinal ligament till they join in the vena cava, could potentially cause iliac vein compression. While this seems more like a theory, in our center we did see this phenomenon getting unfolded in front of our eyes.

We have recently completed a case series (see the table reference) which clearly demonstrated the acquired form of May-Turner physiology and hence the clinical manifestations in patients who had undergone any hardware placement for lumbar spinal conditions. This further expands the age-range of the May-Turner syndrome and now one can have May-Turner clinical features in relatively old age.

Due to lack of proper curriculum in the medical school and dedicated elective rotations in the venous system during residency training, many with unexplained lower extremity edema will be left undiagnosed or untreated.

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