

Erectile Dysfunction in Diabetes: An Opportunity to Prevent Future Cardiovascular Events

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Editorial

Diabetes is a major life style disease, biochemically characterized by hyperglycemia and is asymptomatic most of the time. The major clinical impact of diabetes is due to its varying complications which can affect any organ system or tissue in the body. Sexual dysfunction is a common problem seen in people with diabetes, especially those with poorly controlled diabetes and those with diabetes related complications and co-morbidities.

Sexual dysfunction, especially erectile dysfunction (ED) is common in people with diabetes and the reported prevalence varies from 27 to 75% [1]. But the exact statistics are not available and the number of cases that comes to the clinicians notice represent only the 'tip of the iceberg', because of the inhibition from the patient side to approach the clinician with sexual problems. More over most of the clinicians are not comfortable in addressing sexual problems due to various causes. Erectile dysfunction is 3-4 times higher in diabetic compared to non-diabetic and diabetes itself is a strong risk factor for the development of ED. More over ED develops about 10-15 years earlier in people with diabetes [2].

Erectile dysfunction is no longer considered an isolated sexual problem and it usually precedes cardiovascular (CV) disease onset. It is an early marker of future cardiovascular events. Major pathogenic mechanism of ED in diabetes is impaired endothelium-dependent and neural mediated relaxation of the smooth muscle of the corpus cavernous [3]. Endothelial dysfunction affects both penile arteries and coronary arteries but symptoms appear first in the penile artery territory since penile arteries are smaller (1-2 mm diameter) compared to coronary arteries (3-4 mm diameter) [4]. Usually there is a window of opportunity of 3 to 5 years between the onset of ED and development of symptomatic CVD [5].

Various self-responsive questionnaires like Brief Sexual Function Inventory and International Index of Erectile Function Questionnaire help to assess the pattern and severity of sexual dysfunction. In addition to assessment of glycemic control and diabetes related

complications and co-morbidities, various tests like Rigi scan, NPT, hormonal assays etc help in the evaluation of ED.

Control of diabetes and overall CV risk reduction is important in the treatment of sexual dysfunction in people with diabetes. Treatment of ED depends on underlying cause. Various treatment options available include Phosphodiesterase type 5 (PDE5) inhibitors like sildenafil, tadalafil etc, Intracavernous Injections and penile implants. PDE5 inhibitors improve endothelial dysfunction and may be useful in cardiovascular disease in addition to management of ED [6]. But clinician must always remember that treatment of ED in people with diabetes must always include glycemic control and risk reduction of CV events in addition to specific therapies directed towards ED. So the treatment of ED serves dual purpose- restoring sexual function and reduction of future CV events.

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