## **SUMMARY**

Impotence is one of the most common sexual problems that affect men in different decades of life.

Today it is believed that vasculogenic erectile failure is one of the most frequent causes of organic impotence. Vasculogenic impotence may be due either to poor arterial inflow into the penis (arteriogenic) or to excessive venous leakage.

The arteriogenic impotence results from decreased blood flow to the corpora cavernosa could be primary due to congenital malformation which should be bilateral and severe or secondary to obstructive lesion as in atherosclerosis and post traumatic.

The venogenic impotence results from inability to trap blood within the sinusoids of corpora cavernosa in which the exact cause still unknown but many theories were mentioned to explain that type of impotence.

The evaluation of impotence must begin with the sexual, psychological and medical history, physical examination and routine laboratory tests, then several specific tests were done to evaluate penile vascular supply.

Recently, duplex sonography, arteriography, cavernosometry and cavernosography were used to evaluate both penile arterial and venous network to demonstrate the exact etiology in patients suffering from vasculogenic impotence.

In our study 52 patients with vasculogenic impotence were subjected to clinical examination, papaverine test, duplex sonography, cavernosometry and cavernosography. Some patients undergo to penile arteriography.

The simple screening test to detect vasculogenic impotence is the papaverine test. All our patients undergo to this examination showed variable degrees of abnormal response ranged from just elongation to full erection.

Duplex sonography has been shown to be a useful non-invasive method to evaluate our cases. Several diagnostic parameters were measured including peak systolic velocity, end diastolic velocity and resistivity index. Patients examined by this modality showed arterial insufficiency in 7 cases and possibility of yenous leakage in 45 cases.

cavernosometry and cavernosography is the examination of choice to definite detection of venous leakage. Because it is expensive, invasive and time consuming test, it should be preserved for selected patients suspected by duplex sonography to have venogenic impotence.

In our study, only 44 patients demonstrated venous leakage through different draining veins.

Penile arteriography is invasive, expensive procedure require technical skill and time consuming. It is necessary for definitive diagnosis and for preoperative mapping, but it can not be used as a screening test for all patients with suspected arteriogenic impotence.

In our study only 4 cases undergo to this examination showed different pathological lesions in the penile inflow arteries.