



Duplex Sonography --Pulsed Doppler Study

Procedure Description:

This procedure involves the injection of a drug combination of Papaverine and Phentolamine or an injection of Prostaglandin E-1 into the penis. The drugs cause a dilation of the blood vessels supplying the penis, thus causing an erection. Men with diseased blood vessels which may be caused by high blood pressure, arteriosclerosis, diabetes, etc., will not develop a full erection. Men with abnormal veins will also not develop a full erection. The purpose of this examination is to take a close look at the arteries of the penis. Therefore, the test will tell us whether the erectile dysfunction is due to arterial vascular disease.

The ultrasonography part of the procedure involved measuring the penile arteries before and after the injection of the medication. If the arteries were normal, we expect them to dilate. The Pulsed Doppler is utilized to look at the increase in blood flow. An increase in blood flow will occur if narrowing of the larger arteries supplying blood to the penile arteries is present. A venous leak is considered when no erection is noted despite normal arterial dilation and normal blood flow.

As with medical tests there are possible complications. Approximately 5% of men will develop a small bruise at the injection site which will resolve within 7 to 10 days and cause no further problems. Dizziness has been reported, though it is rare, but this is resolved by lying down for a short period. Some might develop a full erection which can last for many hours. If this occurs, we will have to inject an additional medication to bring the erection down.

No special preparation is required and we will gladly answer any questions you have regarding this test when you report for the procedure.

Thank you.