

## Summery

The aim of this work is to evaluate vasculogenic impotence by monitoring of cavernous oxygen tension.

Thirty male patients with vasculogenic erectile dysfunction were included in this study, their diagnosis based on haemodynamic evaluation, the mean age of the patients was  $49 \pm 11.45$  years. Also ten men with psychogenic erectile dysfunction were included to serve as a control for the study.

Every patient was subjected to the following:

- 1- History
- 2- clinical examination
- 3- Intracorporal drug injection
- 4- Duplex sonography
- 5- Dynamic pharmacocavernosometry

Measurement of cavernous oxygen tension using a blood gas analyzer was performed after aspiration of a single cavernous blood sample at flaccidity and three consecutive blood samples at 10, 20 and 30 min. after intracavernous injection of a combination of papaverine and phentolamine .

In our study, it was found that the mean cavernous oxygen tension at flaccidity showed no significant difference between the three groups.

In the present study, it was found that the cavernous oxygen tension after intracavernous drug injection gradually increased in the three groups but at different rates.

In our study, the cavernous oxygen tension after intracavernous drug injection was markedly reduced than normal level in arteriogenic group and was moderately reduced than normal level in venogenic group while it was within normal level in psychogenic group, this might lead to the conclusion that, the reduction in the cavernous oxygen tension can be considered to be a common mechanism in vasculogenic erectile dysfunction.