RESULTS

Table (1): Preoperative patient characteristics (No. =100).

Variables	Summary statistics
Age (year)	
Mean± S.D.	**56±10**
Median (IQ range)	**59(35:72)**
Marital state	
Married	**97 (97%)**
Not married	**3 (3%)**
Diabetes mellitus	
Non diabetic	**50 (50%)**
Diabetic	**50 (50%)**
Hypertension	
Not hypertensive	**51(51%)**
Hypertensive	**49 (49%)**
Coronary artery disease	
No	**72 (72%)**
Yes	**28 (28%)**
Hb%A1c of diabetic patients	
Mean± S.D.	**8.45±0.62**
Median (IQ range)	**8.45(7:10.1)**
PSA	**2.0996±1.12**
Mean± s.d.	**2.065(0.16:3.82)**
Median (iq range)	
Neutrophil lymphocyte ratio	**2.59± 1.7**
Mean± S.D.	**2(1:1.7)**
Median (IQ range)	
Penile Doppler finding	
Arterial insufficiency	**9 (9%)**
Peyronie's disease	**5(5%)**
Venous leak	**86(86%)**
penile length preoperative	**15.75±1.45**
Mean± S.D.	**16(14:19)**
Median (IQ range)	

In our preoperative data Table (1) we find that:

As regarding Penile Doppler finding,

9 (9%) had arterial insufficiency,

5(5%) had Peyronie's disease,

And most of our patients 86(86%) had Venous leak.

Table (2): <u>Preoperative</u> patient characteristics in both diabetic and non-diabetic group (No. =100).

Variables	CONTROL Non-diabetic (N.= 50)	CASES Diabetic (N.=50)		P-value
		HbA1c ≥ 8 (N.=13)	HbA1c < 8 (N.=37)	
Age (year)				***
Mean± S.D.	**54±8**	**49 ± 13**	**60 ± 8**	0.096
	53.5(39:72)			
Hb%A1c				***
Mean± S.D	**4.826±0.66**	**7.7±0.3**	**8.7±0.5**	<0.001
Median (IQ range).	**4.9(3.5:6)**			
Hypertension				
Not hypertensive (51)	**34(68%)**	**8**	**11**	0.001*
Hypertensive (49)	**16 (32%)**	**5 (46%)**	**26(73%)**	
Coronary artery disease				
No (72)	**41 (82%)**	**9**	**23**	0.044*
Yes (28)	**9 (18%)**	**4(31%)**	**14(41%)**	
Penile dopplar finding				0.856
Arterial-insufficiency(9)	**4 (8%)**		**5**	
Peyronie's disease(5)	**3(6%)**		**2**	
Venous leak (86)	**43(86%)**	**13**	**30**	

In our preoperative patient characteristics data Table (2) we find that:

- **In the HbA1c ≤8 group (n=13):**
  - **Venous leak was the only finding, present in all cases (100%)**
- **In the HbA1c >8 group (n=37):**
  - **Venous leak was still the predominant finding (81.1%, 30 cases)**
  - **Arterial insufficiency was found in 13.5% (combining both entries, 5 cases)**
  - **Peyronie's disease was present in 5.4% (2 cases)**

The higher HbA1c group shows more diversity in doppler findings, while the lower HbA1c group exclusively showed venous leak patterns.

Table (3): intra and postoperative patients results (No. =100).

Variables	Summary statistics
intraoperative complications	
No	**95 (95%)**
Yes	**5(5%)**
postoperative complications	
No	**87 (87%)**
Yes	**13(13%)**
Patient satisfaction	
Not satisfied	**13 (13%)**
Satisfied	**87(87%)**
Partner satisfaction	
Not satisfied	**6 (6%)**
Satisfied	**94(94%)**

penile length early postoperative within 24 h (cm) **Mean± S.D.**	**17.75±1.44**	**penile length early postoperative late post-operative after 6 M (cm)** **Mean± S.D.**	**17.45±1.44**
penile length distribution	**early**	penile length distribution	**Late**
min size	**16**	min size	**14**
max size	**21**	max size	**21**
The mean difference in penile length (Early - Late)		**0.26 ± 0.6**	

penile length distribution number	Count
total patients	100
no change in size	87
decrease size	13
increase size	0

The mean difference in penile length (Early - Late) is 0.26 ± 0.6

Most cases show no change in penile length over time rather than 13 patients show a decrease in the penile length which is reflecting on the patient satisfaction result to be 87 % satisfied and 13 % not satisfied .

Table (4): factors that affect postoperative complication.

Variables	No complication (N.= 87)	complication (N.=13)	P-value
Age (year)			
Mean± S.D.	**55±10**	**59±9**	0.19**
Diabetes mellitus			
Non diabetic (50)	**44(88%)**	6(12%)	
Diabetic(50)	**43(86%)**	7(14%)	1*
Hypertension			
Not hypertensive (51)	**48(94%)**	3(23.07%)	0.039*
Hypertensive (49)	**39 (80%)**	10(76.92%)	
Coronary artery disease			
No (72)	**65 (90%)**	7(10%)	0.182*
Yes (28)	**22 (79%)**	6(21%)	
Neutrophil lymphocyte ratio			
Mean± S.D.	**2.56±1.94**	6.97±2.017	>0.0001
Median (IQ range)	**1.85 (1:10.96)**	7.23 (2.45:10.96)	
Intraoperative complications			
No (95)	**85(89%)**	10(11%)	0.015*
yes(5)	**2 (40%)**	3(60%)	

*P-value was calculated by Fisher's Exact Test

** P-value was calculated by independent sample T-Test

*** P-value was calculated by Mann-Whitney Test

P-value less than 0.05 is statistically significant

We find in the previous table (Table 4) there was no significant difference in the complication post-operative between the diabetic and the non-diabetic group - P value = (1)

Table (5): factors that affect patient satisfaction.

Variables	satisfied (N.= 87)	Not satisfied (N.=13)	P-value
Age (year) **Mean± S.D.**	**56±10**	**52±10**	0.16**
Diabetes mellitus			
Non diabetic (50)	**43(86%)**	7(14%)	
Diabetic(50)	**44(88%)**	6(12%)	1*
Hb%A1c of diabetic patients **Mean± S.D** **Median (IQ range).**	**8.38±0.59** **8.2(7:9.5)**	**8.96±0.63** **9(8.2:10.1)**	0.018**
Hypertension			
Not hypertensive(51)	**45(88%)**	6(12%)	0.772*
Hypertensive(49)	**42 (86%)**	7(14%)	
Coronary artery disease			
No (72)	**64 (89%)**	8(11%)	0.508*
Yes (28)	**23 (82%)**	5(19%)	
postoperative complications			
No (87)	**77(89%)**	10(11%)	0.369*
yes(13)	**10 (77%)**	3(23%)	

*P-value was calculated by Fisher's Exact Test

** P-value was calculated by independent sample T-Test

*** P-value was calculated by Mann-Whitney Test

P-value less than 0.05 is statistically significant

In this table (Table 5) we find that there is no relationship between patents satisfaction and the patient's parameters and no relation between patient's satisfaction and post-operative complications

Table (6_a): postoperative complications.

Variables	CONTROL Non-diabetic (N.= 50)	CASES Diabetic (N.=50)	P-value
Total postoperative complications **No (87)** **yes(13)**	**44(88%)** **6 (12%)**	43(86%) 7(14%)	0.015*
Total postoperative complications **No (87)** **Superficial wound infection(5)** **UTI(7)** **Hypermobile Glans (1)**	**44(88%)** **2(4%)** **4 (8%)** **0(0%)**	**43(86%)** **3(6%)** **3 (6%)** **1(2%)**	0.015*

In the table (6_a) we can find

The analysis revealed a statistically insignificant difference in postoperative complication rates between diabetic and non-diabetic patients undergoing malleable penile prosthesis surgery (p = 0.015).

Table (6_b): postoperative complications.

Variables	Fairly control diabetic (n=13)	Poor control Diabetic (n=37)	P-value
HbA1c	**≥ 8**	**< 8**	
Total postoperative complications **No (43)** **yes(7)**	**13(100%)** **0 (0%)**	30(81%) 7(19%)	0.1679*
Total postoperative complications **No (43)** **Superficial wound infection(5)** **UTI(7)** **Hypermobile Glans (1)**	**13(100%)** **0(0%)** **0 (0%)** **0(0%)**	**30(81%)** **3(8%)** **3 (8%)** **1(3%)**	

*P-value was calculated by Fisher's Exact Test

** P-value was calculated by independent sample T-Test

*** P-value was calculated by Mann-Whitney Test

P-value less than 0.05 is statistically significant

In the table (6_b) we can find that

- There are 3 types of complications observed:
  - Superficial wound infection/dehiscence (3 cases)
  - UTI (3 cases)
  - Hypermobile Glans (1 case)
- The majority of cases (43) had no complications

HbA1c Relationship:

- Highest mean HbA1c (9.33) was observed in cases with superficial wound infection
- UTI cases had mean HbA1c of 8.8
- Cases without complications had mean HbA1c of 8.37
- The single case of Hypermobile Glans had HbA1c of 8.3

This suggests a trend where higher HbA1c levels might be associated with increased risk of complications, particularly wound-related complications.