

(PD20-03) Assessing the Safety of Surgical Intervention During the Acute Phase of Peyronie's Disease

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Disclosure

- I have nothing to disclose.

Introduction

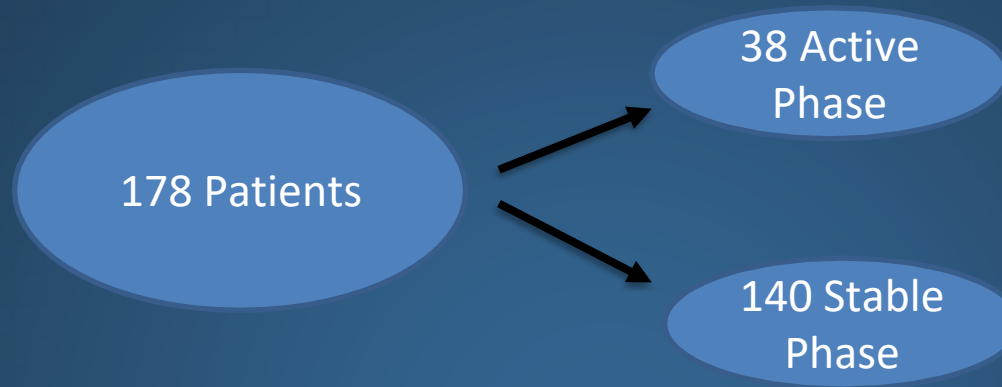
From the AUA:

- Peyronie's Disease is a disorder characterized by disorganized, excessive deposition of collagen that results in plaque formation within the penile tunica albuginea
- **Active Disease** – Characterized by dynamic and changing symptoms. Penile and/or glanular pain or discomfort with or without erection is the defining symptom of active stage
- **Stable Disease** – Symptoms clinically quiescent or unchanged for at least three months



*Mulhall JP, Creech SD, Boorjian SA, et al. J Urol. 2004;171(6 Pt 1):2350-3.
Nehra A, Alterowitz R, Culkun DJ, et al. J Urol. 2015 Sep;194(3):745-53.
Image courtesy of Tulane Urology.*

Methods



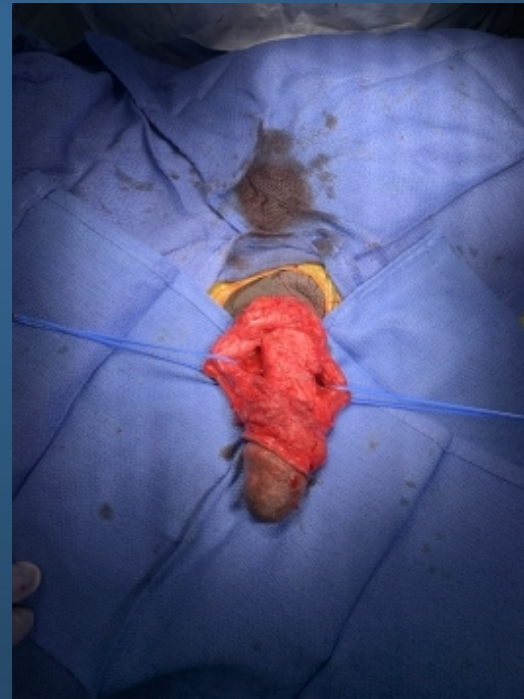
- **Exclusion criteria** – hourglass deformity, initial curvature <30 degrees, and calcified penile plaques
- **Procedures** – penile plication, incision or excision and grafting, inflatable penile prosthesis placement
- **Outcomes Measures** – perioperative complication rates, postoperative pain

Results

	Overall	Acute	Stable	P-value
n	178	38	140	
Demographics				
Duration of Symptoms (months)	38.4	8.4	47.5	<0.001
Age (years)	62.1	60.4	62.5	0.182
Diabetes Mellitus	37 (20.8%)	4 (20.8%)	33 (23.6%)	0.087
Hypertension	82 (46.1%)	15 (39.5%)	66 (47.1%)	0.405
Preoperative Treatment of ED	93 (52.2%)	18 (47.4%)	75 (53.6%)	0.501
History of Trauma	50 (28.1%)	13 (34.2%)	37 (20.8%)	0.501
Presurgical Pain	72 (40.4%)	38 (100%)	34 (19.1%)	<0.001
Mean Preoperative IIEF Score	14.5	15.5	14.2	0.320
Mean Preoperative Curvature	57.5	58.6	57.2	0.633
Direction of Curvature				
Dorsal	98 (55.1%)	24 (63.2%)	74 (52.9%)	0.265
Dorsolateral	28 (15.7%)	3 (8.8%)	25 (18.9%)	0.147
Lateral	30 (16.9%)	5 (14.7%)	25 (18.9%)	0.551
Ventral	22 (12.4%)	19 (47.5%)	56 (40.0%)	0.275

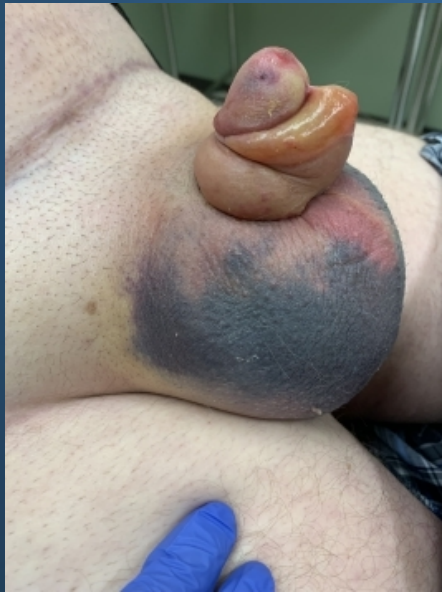
Procedures Performed

Outcomes	Overall	Acute	Stable	p-value
Penile Plication	73 (41.0%)	11 (28.9%)	62 (44.3%)	<0.001
Incision + Grafting	25 (14.0%)	7 (18.4%)	18 (12.9%)	0.387
Excision + Grafting	5 (2.8%)	1 (2.6%)	4 (2.2%)	0.941
IPP	75 (42.1%)	19 (47.5%)	56 (40.0%)	0.275



Outcomes

Outcomes	Overall	Acute	Stable	p-value
Mean Follow-Up in Months	9.1	8.2	9.4	0.643
Perioperative Complication	23 (12.9%)	4 (10.5%)	19 (13.6%)	0.619
Intraoperative	5 (2.8%)	3 (7.9%)	2 (1.4%)	0.039
Postoperative	18 (10.1%)	1 (1.4%)	17 (12.1%)	0.093
Postoperative Pain	34 (19.1%)	7 (18.4%)	27 (19.3%)	0.905



Hematoma



Infection after IPP Placement

Conclusions

- Higher intraoperative complication rates in acute phase Peyronie's Disease
- No significant difference in perioperative complications overall
- Data suggest that surgical intervention in acute phase Peyronie's Disease is safe
- Larger studies necessary to define safety of surgical intervention during acute phase of Peyronie's Disease