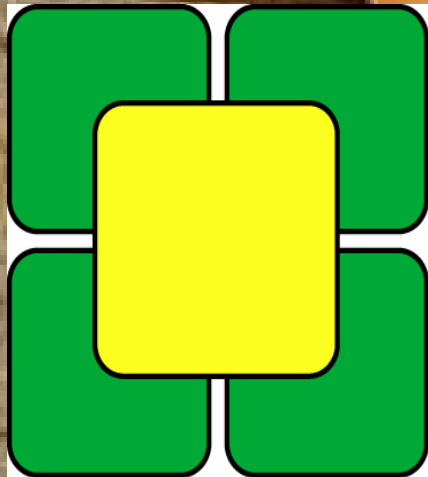


**Non-Surgical  
Management of  
Peyronie's Curvature:  
Experience Using  
Intralesional  
Intron-A Therapy**

**Lawrence S. Hakim, MD, FACS**  
**Sammy Khater, MD**

**Department of Urology**  
**Cleveland Clinic Florida**  
**Weston, Florida**



# Purpose

- Penile curvature and plaque due to Peyronie's disease or injury, with or without concurrent Erectile Dysfunction, is often encountered in the urologist's office

# Purpose

- This represents a significant source of:
  - Patient and partner frustration,
  - Embarrassment and anxiety due to a combination of sexual dysfunction, curvature, penile shortening, pain, and difficulty with intercourse.
  - Physician frustration due to poor treatment options

# Objectives

- The objective of this study was to evaluate the efficacy of a specific non-surgical management alternative for these patients
- We present our clinical experience with a non-surgical approach utilizing Intralesional Therapy with Intron-A in patients with stable disease.

# Patient Group

- 35 patients presented with significant stable penile curvature and plaque.
- All patients underwent a complete history and physical examination; IIEF (EF domain score) was also evaluated.
- Appropriate laboratory studies obtained.
- A comprehensive hemodynamic evaluation with duplex Doppler ultrasonography using vasoactive medication with redosing was performed.

# Patient Group

- Degree of curvature ranged from 10-85 degrees prior to treatment
- Length of time\*: 6 mos to 5 years
- Plaque size ranged from 1-4 cm
- Plaque Location Varied:
  - Dorsal Plaque: 65%
  - Lateral (or Dorsolat): 25%
  - Ventral: 10%

\* Since onset of plaque and curvature

# Patient Group

- The major patient and partner complaints included:
  - Difficulty with intercourse due to curvature.
  - Patient Embarrassment
  - Poor erection quality/shape
- Goal of therapy was to improve these factors

# Patient Group

- 10/35 had significant plaque and curvature, with no significant ED by Duplex ultrasonography or history.
- 20/35 men had significant Penile Plaque and curvature with concurrent minimal to moderate ED (ED responsive to PDE5I or PEP therapy)
- 5/35 men demonstrated significant, large, typically calcified plaque and severe organic ED, unresponsive to PDE5I/PEP

# Patient Group

- 30/35 patients underwent bi-weekly intralesional therapy with 5 million Units of Intron-A (alpha-interferon) in 9cc normal saline.
- This was performed utilizing either a 12 or 24-week course (6 or 12 injections) based on patient response.
- Repeat hemodynamic evaluation was performed at 18 and 36 weeks.

# Patient Group

- 5/35 men with Plaque and Severe organic ED that was unresponsive to oral PDE5-Inhibitor therapy or intracavernosal vasoactive agents, *declined* Intralesional therapy and proceeded to Penile Prosthesis Surgery with Peyronie's Repair.

# Patient Group

# Patients	Degree of ED	ED Therapy	Peyronie's Therapy
10	None	-	Intron-A
20	Min-Mod	PDE5I	Intron-A
5	Severe	IPP	Surgery

# Technique

- Premedication with NSAIDS/Tylenol
- Penile Block at base of phallus with 1% lidocaine; 10 min pressure applied
- 5 mil Units Intron-A in 9cc NS separated into 3 syringes with 25 G needle
- Intron injected directly into plaque (in and out technique; plaque can be 'heard')
- Pressure dressing reapplied x 10 minutes
- Instructions given

# Technique

- **Criteria for 2nd Course of Intron-A:**
  - **Evidence of some improvement in penile curvature, shape, sexual function after 1st course of therapy**
  - **Decreased plaque size or less narrowing after 1st course of therapy**
  - **Absence of progression on follow-up hemodynamic testing**
  - **Patient desire for further improvement**

# Results

- 8/30 underwent a 12-week course (6 injections, every other week)
- 22\*/30 completed a 24-week course of Intralesional therapy (2nd 6-injections)
  - \* includes 2 patients previously treated with intralesional verapamil; significant improvement after 12 injection course of Intron-A

# Results

- 8/30 patients reported complete treatment satisfaction after 6 injections (significant enough improvement in curvature/shape to allow comfortable intercourse).
- 15/22 (68%) who proceeded to 2nd course experienced further improvement in curvature to allow comfortable intercourse.

# Results

- Five of these 22 patients have subsequently undergone a surgical straightening procedure for residual curvature.
- 5/35 initial *severe* ED patients underwent initial IPP with Peyronie's repair.

# Side Effects of Intron-A

- Overall, side effects were minimal
- Primarily, cold and flu symptoms in <15% of patients
- Typically responsive to oral NSAIDs
- Self-limiting (<24 Hours)
- Often prevented when 'pre-medicated'
- Most improved over time (decreased frequency)

# Conclusion

- Many men with Sexual Dysfunction suffer from *both* Erectile Dysfunction and Peyronie's Curvature
- Although some may improve over time or respond to simple, conservative management with oral therapy, a significant subset of patients will require further intervention, in order to improve their penile curvature and most importantly, quality of life.

# Conclusion

- Overall, 23/30 patients (77%) reported treatment satisfaction with significant improvement in curvature to allow comfortable intercourse, with or without oral PDE5-Inhibitor therapy.
- No patient suffered worsening of penile curvature or erectile function on objective evaluation.
- Improvement has been stable in clinical follow-up (Range: 6-18 months).

# Conclusion

- This preliminary data suggests that in selected patients with coexisting mild-moderate organic ED along with Peyronie's disease and penile curvature, minimally invasive therapy with Intralesional Intron-A can be performed safely and effectively as a first-line intervention.
- May allow patients to avoid the need for surgical intervention.