

**WORLD MEETING ON SEXUAL  
MEDICINE  
ISSM/SMSNA  
CHICAGO AUGUST 2012**



**TAKE HOME MESSAGES  
PEYRONIE'S DISEASE**



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# MEETING CONTENTS IN PEYRONIE DISEASE

- 1 POSTER SESSION dedicated
- 1 PODIUM SESSION dedicated
- OTHER ABSTRACTS (Basic Science and Surgery Sessions)

## SELECTED HOT TOPICS-HIGHLIGHTS

1. Basic Research
2. Diagnosis/Evaluation
3. PD Relationships
4. Medical/Surgical Treatment

# BASIC SCIENCE

#009 Mineralization and mechanical testing of Peyronies disease tissues

Schmid et al. Rush University/ UC Santa Barbara/ University of Illinois

- Investigate mechanical properties of plaque tissue and mineral content
- Human tissue from Peyronie's plaques
- Detection using SEM and EDX (Spectroscopy)



- Deposition of Calcium phosphate increase tensile/elastic, making tissues stiffer
- Demonstration of Silicon on the plaques (Potential New Therapeutic Approach to detect or prevent)

# BASIC SCIENCE

#053 A natural lubricant superficial zone protein enhanced by TGFβ treatment of cell cultures derived from PD patients Mineralization and mechanical testing of Peyronies disease tissues

Schmid et al. Rush University

- TGFβ stimulated collagen/elastin production from tunica cells
- Lubrication is provide de mucin-like glycoprotein (SZP)
- AIM: Potential of cell to synthesize SZP with/without TGFβ
- Cell cultures derived from human tunica



- TGFβ increase synthesis of lubricating SZP
- SZP may serve as a predictor/marker to detect activate TGFβ and define plaques subpopulations

# PD Relationships

#245 Does Testosterone Deficiency exaggerate the clinical symptoms of PD?

Park et al. Pusan National Hospital

- Serum T Levels influences wound healing and are decreased over aging
- AIM: Evaluate relationship between PD severity and T Levels
- 106 pat; Group 1 (Serum T <3.5) and Group 2 (Normal levels)



- Presence of T deficiency have a relationship with severity affecting penile deformity/plaque size/ED

# PD Relationships

#306 Antinuclear antibody titres in PD

Shamloul/Bella/Zappavigna; University of Ottawa, Canada

- Evaluate any relationship between Antinuclear Antibodies and PD
- 120 pat; Group A (cases), Group B (Healthy controls)
- Titres of ANA, TT, FT and SHBG were analyzed



- Authors have not found any significant association between ANA titres and PD. Low T were associated

# DIAGNOSIS/EVALUATION

#054 Predictors of deformity stabilization and progression in PD

Mulhall JP et al. MSK Cancer Center, USA

- Only small percentages of PD patients improve over time
- AIM: Define of predictors of natural history could be defined
- 176 patients; Several groups based on time of presentation <6 /7-12 and 13-18 months
- Several variables were analyzed



- Uniplanar curvature/patient age/ TTP were predictors
- In conclusion “Those presenting early and younger were the most likely to improve over time”

# Medical/Surgical Treatment

**#056 Relationship of baseline penile curvature deformity severity and symptom bother observed in patients with PD**

**Lipshultz/Honig/Seftel/Smith/Tursi/Kaufman and Burnett , USA**

- Multiinstitutional Phase III double-blind/placebo control
- Office-based injection collagenase clostridium histolyticum (832 patients)
- AIM: Relationship between baseline curvature severity & bother
- 64 centers (US and Australia)



- Over half of the patients with 30-60° still experienced high levels of bother and distress
- Measuring curvature alone does not represent the full impact of the disease/consider psychosexual components



# Medical/Surgical Treatment

#092 Does calcification of PD plaque predict progression to surgical intervention?

Rybak/Levine; Rush University, USA

- Patients with Calcified plaques are less responsive to non-surgical therapies
- AIM: Investigate whether stratification of calcification (ultrasound) would serve as a predictor of surgery
- 792 retrospective patients
- Classification: Grade 1 (<0.3cm) Grade 2 (>0.3 cm <1.5 cm) and Grade 3 (>1.5 cm or 2 plaques >1 cm)



- Men with calcified plaques are likely to undergo surgery
- Grade 3 have an increased likelihood of progression to surgical intervention

# Medical/Surgical Treatment

**#179 Internal correction of PD plaque during infaltable penile prosthesis placement: A viable option**

**Perito P, Gheiler E, Bianco F. Florida, USA**

- Describe a new approach to correct penile curvature during IPP placement
- 234 patients with PD and ED
- Using nasal speculum inside the affected corpora / Spread to fracture plaque / Linear incision using 12# blade or Metzenbaum
- They use of all penile curvatures (25°-120°)



- All cases were corrected (<20°)
- Quick and efficacious with minimal/none complications

# Medical/Surgical Treatment

#090 Penile length and girth restoration in severe PD based on circular and longitudinal grafts

Kuehhas/Herwig and Egydio- Austria/Brasil

- Describe their approach of IPP and PD correction using grafts
- Importance % of PD patients dissatisfaction after IPP
- 105 patients
- IPP plus penile straightening using "Egydio Technique"
- Penile length gain 3.6 cm (2-5 cm)



- Maximum Length and Girth restoration
- High patients satisfaction
- Length/Girth important to recover self-esteem

## “THE FIVE TAKE HOME MESSAGES”

1. The plaque contain Silicon / SZP-TGFB define plaques subtypes
2. Low T is related with PD Severity / Negative results for relationship between ANA and PD
3. Importance of Age/TTP related with natural history as well as Psychosexual profiles in patients counseling
4. Heavy calcified plaques are more likely to progress after surgical intervention
5. New internal correction of PD during IPP placement along with grafting strategies remains surgical options for PD/ED patients