New Indications for Embolization Therapy in Gynaecology, Urology, and Beyond ...

Ulf Teichgräber, MD, MBA
Director of Radiologie
University Hospital Jena (Germany)
Disclosure of conflict of interest

Speaker name: Ulf Teichgräber

I have the following potential conflicts of interest to report:

Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest
Standard practice of embolization – New applications?

- Vascular Plug
- Coils
- Alcohol
- Particle
- Aethoxysclerol
- Onyx, Ethibloc
- Cyanoacrylat + Lipidiol
Benign common diseases - New?

- Uterine Fibroid Embolization (UFE)
  - RCT: EMMY-Trial 2008-2010
  - RCT: Rest-Trial 2011
  - RCT: FUME-Trial 2012

Equal to Hyster- and Myomectomy
Benign common diseases - New?

- Prostatic Arterial Embolization (PAE)
  - RCT: Gao Y et al., March 2014
  - STREAM Trial 2017 (age matched)
  Equal to TUR-P after 6 months
Material
Pelvic Arteries

Women

Men
Identification of the prostatic artery
Learning curve

Fluoroscopy times (min)

No. of patients
Treatment for Overweight Patients (BMI 24-48)

- **Bariatric Gastric Embolization (Ghrelin):**
  - Partikel embolization of fundal vascular territory (500-700 µm)
  - GET LEAN Trial 2016 (n=4)
  - BEAT obesity Trial (Safety) 2017 (n=5)
  - Efficacy and Safety 2018 (n=16)

Mean weight loss: 9-10%

Adverse Events: 6-20%

No long term data
Chronic bleeding due to haemorrhoidal disease

- Hemorrhoids Arterial Embolization:
  - coil embolization of superior rectal arteries
  - Vidal V et al. CVIR 2015: First 14 Cases
  - Zakharchenko A et al. Diag Inter 2016 (n=40)
  - Tradi F et al. JVIR 2018 (n=25)
Chronic bleeding due to haemorrhoidal disease
Embolization due to haemorrhoidal disease

- Clinical success in 72-80% after 12 months
- Hemorrhoids showed a 43-52% size reduction after embolization
- Repeated embolization during the learn curve (partial embolization)
- No ischemic complication
- Anal sphincter contractility normalization after one month
Conclusion

• **Bariatric Gastric Embolization:**
  - very beginning results
  - Placebo effect not clear
  - follow up up to 9 months only
  - without life style modification loss of muscle as well as fat!
  - Bariatric surgery needs patent LGA!

• **Hemorrhoids Arterial Embolization:**
  - high clinical success
  - only minor complications
  - Short-term results after embolization with regard to symptom management for hemorrhoidal disease are very encouraging
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