BACKGROUND
Abdominal wall neuroma pain is an under-recognized significant contributor to chronic abdominal wall pain (CAWP) that affects approximately 1:1800 people (1). An estimated 15-30% of patients suffer from CAWP post abdominal and pelvic surgery (2,3).
As it can lead to significant disability and decreased quality of life for many people, effective methods of treatment are indicated. To date, no gold standard of care exists.
The success of nerve allograft reconstruction and Targeted Muscle Reinnervation (TMR) in the treatment of chronic neuroma pain syndromes suggests that these methods may be effective in CAWP when due to a painful neuroma.
The aim of this study is to review the outcomes of surgical interventions employing nerve allograft reconstruction and/or TMR for painful abdominal wall neuromas.

METHODS
- We conducted a retrospective and prospective review
- Our inclusion criteria involved all patients who underwent surgical treatment for painful abdominal wall neuromas by one surgeon at Northwestern Memorial Hospital, from 1/2009-1/2020
- Follow up pain surveys were given to all patients who met inclusion criteria
- This study was approved by the Northwestern University IRB

RESULTS
- 20 patients met inclusion criteria
- 27 nerves treated with TMR and/or allograft nerve reconstruction
- intercostal nerves 48% (13)
- ilioinguinal nerves 37% (10)
- 28 total procedures
- 75% completed the survey
- mean post op pain score 2.8
- 26.7% reported using opioid pain medications
- 3 patients required repeat surgery
- 18/20 patients with improvement after surgical treatment
- Mean follow-up: 18.1 months

CONCLUSIONS
- Painful abdominal wall neuromas can be improved with surgery
- 90% of patients had significant improvement
- Nerve allograft reconstruction seems preferable for upper abdomen intercostal neuromas
- TMR preferred for ilioinguinal neuromas
- More patients with long term data needed, including preop pain surveys
- Increased awareness of painful neuromas following abdominal surgery may lead to:
  - Efficient work up
  - Cost effective care
  - Improved quality of life

REFERENCES
1) Koop H, Koprdova S, Schürmann C. Chronic Abdominal Wall Pain. Dtsch Arztebl Int. 2016 Jan 29;113(4):51-7