REFERENCE

- [1] Cho L, Rocco M, Colquhoun D, et al. Clinical Profile of Statin Intolerance in the Phase 3 GAUSS-2 Study. *Cardiovasc Ther* 2016;30(3):297–304.

Disclosure of Interests: Yarden Yavne: None declared, Rivka Sheinin: None declared, Rita Nogueira: None declared, Nicola Luigi Bragazzi: None declared, Shmuel Tiosano: None declared, Abdulla Watad: None declared, Kassem Sharif: None declared, Daniela Amital: None declared, Hofit Cohen: None declared, Howard Amital Grant/research support from: Pfizer, AbbVie, Janssen, Grant/research support from: Pfizer, AbbVie, Janssen, Consultant for: Pfizer, Merck Sharp & Dohme, Consultant for: Pfizer, Merck Sharp & Dohme, Speakers bureau: Pfizer, Merck Sharp & Dohme, Janssen, Sanofi, Bristol-Myers Squibb, Abbvie, Neopharm, Speakers bureau: Pfizer, Merck Sharp & Dohme, Janssen, Sanofi, Bristol-Myers Squibb, Abbvie, Neopharm

DOI: 10.1136/annrheumdis-2019-eular.3349

Back pain, mechanical musculoskeletal problems, local soft tissue disorders

AB0909

EFFICACY AND SAFETY OF ULTRASOUND GUIDED ASPIRATION AND INTRA_LESIONAL CORTICOSTEROIDS INJECTION OF RUPTURED BAKER'S CYST

Mohammed A. Mortada, Youmna A. Amer. Faculty of Medicine. Zagazig University, Rheumatology and Rehabilitation, Zagazig, Egypt

Background: Baker's cyst is the most common mass in the popliteal fossa and results from fluid distension of the gastrocnemio-semimembranosus bursa. The most common complication of Baker's cyst is the rupture or dissection of fluid into the adjacent proximal gastrocnemius muscle belly, which results in a pseudothrombophlebitis syndrome mimicking symptoms of DVT.

Treatment of ruptured Baker cysts ranged from conservative management to surgical resection.

Ultrasonographic guided aspiration and corticosteroids injection may be an effective and easy method of management of these cases.

Up to the best of our knowledge, this is the first study to detect the efficacy and safety of ultrasonographic guided aspiration and injections of ruptured Baker cysts.

Objectives: To evaluate the efficacy and safety of ultrasonographic guided aspiration and local corticosteroids of ruptured Baker cysts based on follow-up clinical and sonographic results.

Methods: A retrospective study was conducted on 42 patients (12 males and 30 females, mean age 36 +/- 10 SD years) affected by a ruptured Baker cysts associated to knee joint disorders in the period between January 2013 to January 2019. The diagnosis was done by clinical presentation of acute calf pain, swelling, tenderness at the calf muscles and ultrasonographic evidences of ruptured backer cysts in the form of free fluid collection in the calf connected to a well defined cyst at the back of knee.

All cases were treated by ultrasonographic guided aspiration and intralesional injection of corticosteroids once or twice one week a part. Follow up were done on a weekly basis until complete resolution of symptoms then 3 months later. Visual analogue scale (VAS) for calf pain and Rauschnig-Lindgren and Lysholm Knee Scoring Scales were used to assess pre/post-injection knee functions.

Results: The primary diagnoses to patients presented with ruptured Baker cyst in this study were as follow: 18 (42.8%) cases with rheumatoid arthritis, 15 (37.5%) cases with osteoarthritis and 9 (21.4%) cases with psoriatic arthritis.

Clinical parameters (VAS for calf pain and Rauschnig-Lindgren score) improved significantly in all patients at both post injection evaluation visits.

Rauschnig-Lindgren score was significantly lower after US guided injections (mean, 0; range, 0-1) than at baseline (mean, 2; range, 1-2); $p < 0.001$ (table1).

VAS for calf pain also significantly lower after US guided injections (mean, 0.5; range, 0-1) than at baseline (mean, 9.5; range, 0-10); $p < 0.001$.

Ultrasonographic features improved significantly with complete disappearance of free fluid at the calf in 35 (83.3%) cases one week after the injection.

As regards Baker cyst only 5 (11%) cases showed complete disappearance of the backer cyst and in the majority of cases 37 (88%) there were persistent Baker cysts.

No side effects were reported in all cases.

Abstract AB0909 Table 1. Clinical results of Baker cyst excision (Rauschnig and Lindgren scale and VAS for calf pain)

	Pre injection	1 week later	3 months later
grade 0	0	30	39
Grade 1	0	8	3
Grade 2	6	4	0
Grade3	36	0	0
VAS for calf pain	9.5	1.5	0.5

VAS; visual analogue scale

Conclusion: Ultrasonographic guided aspiration and intralesional corticosteroids injection is an effective and safe method in management of ruptured Baker cysts.

REFERENCE

- [1] Nigerian Journal of Orthopaedics and Trauma June 2009; 8 (1): 31-32

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.3511

AB0910

EFFECTIVE RESTORING MOTION AND EFFECTIVE TREATMENT OF MYOFASCIAL AND NEUROPATHIC LOW BACK PAIN BY TARGETED DRY NEEDLING USING ULTRASOUND GUIDANCE

Rostyslav Bubnov^{1,2}, Lev Kalika³. ¹Zabolotny Institute of Microbiology and Virology, NAS of Ukraine, Kyiv, Ukraine; ²Clinical Hospital "Pheophania" of State Affairs Department, Ultrasound, Kyiv, Ukraine; ³NYDNRehab: Chiropractic and Physical Therapy Clinic NYC, New York, United States of America

Background: Low back pain (LBP) involves both myofascial and neuropathic components of pain. Neuropathic pain is a widespread problem, require continuous consumption of medications. Muscle spasticity might evoke nerve compression, dry needling (DN) of myofascial trigger points (MTrP) under ultrasound (US) guidance is effective method for treatment myofascial pain [1,2] restoring posture [3] and can be effective for neuropathic pain.

Objectives: The aim was to evaluate efficacy of dry needling under US guidance for treatment myofascial and neuropathic components of LBP.

Methods: We included 52 patients, 37 females, aged 18-84 years (the average was 55 years) with clinically diagnosed chronic low back pain with neuropathic component with clinically diagnosed low back pain over 3 month with neuropathic component and reduced motility in spine, pelvis and lower extremity. All patients had symptoms over 3 month, underwent general exam, including MRI, laboratory, neurologic, orthopedic tests. We conducted precise physical tests and neuromuscular ultrasound using M-mode and evaluated nerves and motion in intervetebral spaces, pelvis, intrinsic foot and leg muscles. We conducted ultrasound survey at the levels of predicted nerve injury. Patients received DN of MTrP under US guidance according to approach by R.Bubnov [1,2], considering nerve entrapment area. Visual analogue scale (VAS, 0-10) and Leeds Assessment of Neuropathic Symptoms and Signs (LANSS) scores were measured before, immediately after, 24 hours, and 7 days after intervention.

Results: After 7 days, VAS scores showed pain improvement from 7.4 to 2.2; LANSS scores improved from 16 to 4. In diabetic and postherpetic neuropathy cases we obtained similar results as in rest of patients ($p < 0.05$). US demonstrated improvement nerve structure, increasing motility, contractility (muscle contracted/rested thickness) on M-mode during functional tests and walking in all levels. Improvement of neuropathy signs as decrease of fascicles diameter from 2 to 0.9 mm measured on US in sciatic nerve, both in tibial, peroneal portions, data correlated with self-assessment pain decrease ($r > 0.8$). Preferably MTrP were identification in supinator muscle (wrist pain); rotator muscles (infraspinatus, supraspinatus, subscapular and teres minor muscles); scalene muscles; obliquus capitis muscles, and also in fascial tissue.

Conclusion: Dry needling under US guidance effectively reduce myofascial pain, ameliorate symptoms of neuropathy and local muscle hypomotility in low back pain. Further research needed for development US patterns and study causation in chain spasticity-contraction- motion-neuropathic pain.