



ORIGINAL RESEARCH PAPER

Medicine

PLANTAR FASCITIS :USG GUIDED PRP TREATMENT FR PLANTAR FASCITIS

KEY WORDS: heel pain, plantar fasciitis, prp therapy

Dr. Jagdambe Shribalkrishnarao Sheshrao

MBBS DA FIPM CIPM.

Dr. Vikram Sonawane

MBBS MD.

Dr. Shirish Mahure

MBBS MD.

ABSTRACT

Aim: Aim of this report is to show the effect of prp therapy in plantar fasciitis pain patients. Use of such modality of interventional pain management to give relief to patient. **Background:** Plantar fasciitis is the most common pain disorder in india.more than 10 million cases per year found in india.Its usually self treatable condition.In it there is inflammation of plantar fascia occurs which give stabbing pain near the heel.pain is worse in the morning nd incrsed wth prolonged standing,running or jumping.It can b treated wth medicines nd conservatively.But if nt get relief then can b treated wth interventional pain management that is PRP THERAPY. **Case Report:** 55 yr male presented wth severe heel pain since 1 yr.,treated wth conservatively wth medicine nd gvn one shot of steroid inj in heel.But still there is no improvement in pain.Rather its incrsed.Patient is diagnosed clinically as well as by doing usg.In usg there is inflammation of plantar fascia about 9-10 mm in thickness found.Then after pt is treated wth USG GUIDED PRP THERAPY .Patient get dramatic improvement in pain score frm 9/10 to 0/10. **Conclusion :** We conclude that plantar fasciitis is very excruciating pain condition .Which can b managed wth usg guided prp therapy if nt relieved conservatively. **Clinical Implication :** Patient with plantar fasciitis can b managed wth prp therapy.

INTRODUCTION

PLANTAR FASCITIS is charecterised by inflammation of plantar fascia at the attachment site of fascia to calcaneum.Plantar fascia run along the foot. Frm calacaneum to metatarsal.It support the arch of foot nd absorb shock while walking.It commonly cause stabbing pain that usually occurs wth the first step in the morning ,as you get up nd move it slowly decreses.But might return after some time.Causes of plantar fasciitis are unknown.It commonly occurs in runners,nd overweight people.It can b diagnosed clinically nd radiologically.Usq is the best way fr diagnosis.After diagnosis it can b managed wth conservative medical management nd physiotherapy.If nt relived then sometime treated wth steroid inj.nd then also nt get relief then some people gv prp {platelet rich plasma therapy }therapy .It shuld b gvn under direct visualization of USG.

CASE REPORT

55 YR M presented wth complain of severe heel pain,unable to walk since 1 year.So many consultation done.So many medicine taken.But not get any kind of relief.He was having severe pain whenever he wake up frm bed nd tk first step ,literally he coulnt walk in room too.His vas score was 9/10.Some where he has taken one steroid inj in heel but pain is incrsed more rather than going down.So he become reluctness fr any kind of injection.After that he visited me .First i hav diagnosed this condition by doing usg sole .In it inflammation of plantar fascia about 9-10 mm in thickness found.Its a severe kind of plantar fasciitis.Patient was actually crying wth pain.He was unable to attend his job because of this pain.His daily routine work was also hampered.

We decided to gv prp therapy under usg guidance.I councelled patient nd his relative.On first he was not ready fr any kind of injecrion in sole.Because his experience was bad.After taking in confidence nd counselling he become ready fr it.I did first prp injection under usg guidance ,nd given tab ultracet if pain come.after 30 days his second injection was planned .This time he was very happy as his pain score came frm 9/10 to 2/10 .He happily taken his second shot of prp.nd after 30 days third shot .At last he become total pain free.His vas score become 0/10.

DISCUSSION

Plantar fascia is strong fibrous attachment of medial tuberosity calcaneum to ball of metatarsals.In plantar fasciitis there is degeneration of ths fascia occurs nd it get thickenend.nd giving pain in heel area while first step after getting up frm bed .This is self limiting disorder most of the time.But some time it doent get self limited Need to take medicines nd do physiotherapy.Most of the time by doing this pain will subside.But few time it doesnt relieve.In such conditions inteventional pain physisicians do platelet rich plasma injection therapy in plantar fascia.It need 3 settings one mth apart.wth the help of ths platelet rich plasma ths inflammation of plantar fascia get resolved nd patient become pain free.In it 20 ml blood drawn frm patient.It get centrifuged in prp machine by adding 1-2 ml of ACD anticoagulant .After centrifuge prp is made ready.THS IS PLATELE CONCENTRATE .Ths prp shuld b injected under usg guidance in precise location of inflammed area of fascia.In prp there r so many growth facttors releaed frm activated platelets like PDGF,TGF,VEGF,EGF,IGF,FGFWhich will help in healing nd regeneration of tissue.

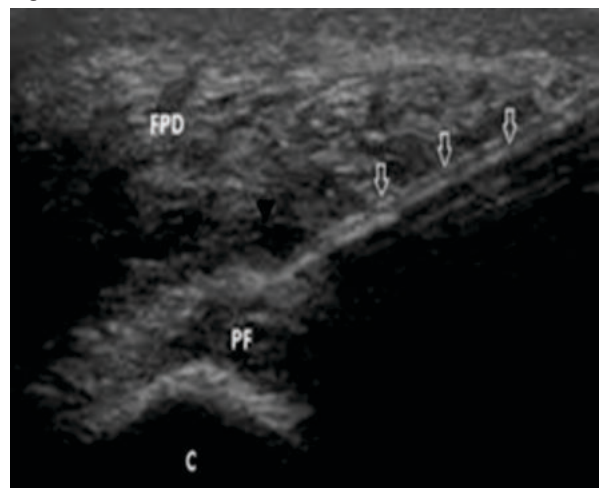


Figure 1 USG Guided PRP INJ

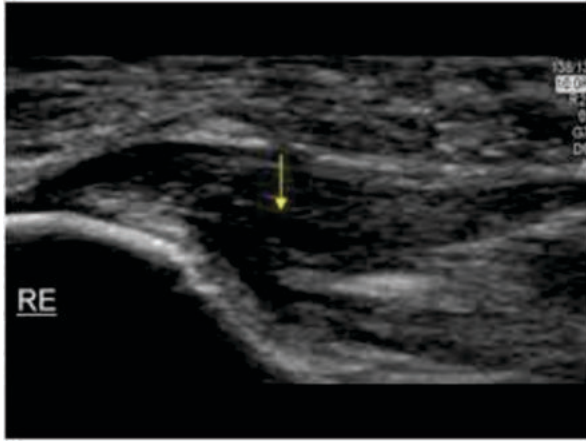


Figure 2 Plantar Fasciitis

Source Of Support : Nil

Conflict Of Interest : None

REFERENCES

1. J.L. Acevedo, J.L. Beskin Complications of plantar fascia rupture associated with corticosteroid injection *Foot Ankle Int*, 19 (2) (1998), pp. 91-97 [View article CrossRefView in ScopusGoogle Scholar](#)
2. E.D. Ambrogi, L. Giurato, M.A. D'Agostino, L. Uccioli Contribution of plantar fascia to the increased forefoot pressures in diabetic patients *Diabetes Care*, 26 (2003), pp. 1525-1529 [Google Scholar](#)
3. R.E. Anderson, M.D. Foster Operative treatment of subcalcaneal pain *Foot Ankle Int*, 9 (1989), pp. 317-323 [View article CrossRefView in ScopusGoogle Scholar](#)
4. A.S. Omar, *et al.* Local injection of autologous platelet rich plasma and corticosteroid in treatment of Lateral epicondylitis and plantar fasciitis: randomized clinical trial *Egypt Rheumatologist*, 34 (2) (2012), pp. 43-49 [View PDFView articleView in ScopusGoogle Scholar](#)
5. Martinelli N, *et al.* Platelet-rich plasma injections for chronic plantar fasciitis. *International orthopaedics*;2012. p. 1-4. [Google Scholar](#)
6. E. Akhahin, *et al.* The comparison of the effect of corticosteroids and platelet-rich plasma (PRP) for the treatment of plantar fasciitis *Arch. Orthop. Trauma Surg.*, 132 (6) (2012), pp. 781-785 [View article CrossRefGoogle Scholar](#)
7. Steven. Sampson, Michael. Gerhardt, Bert. Mandelbaum Platelet rich plasma injection grafts for musculoskeletal injuries: a review *Curr Rev Musculoskelet Med*, 1 (2008), pp. 165-174 [View PDF](#) This article is free to access. [CrossRefGoogle Scholar](#)
8. Gibbon WW. Plantar fasciitis; *US Imaging; Radiology*; (182): 285; 1992. [Google Scholar](#)
9. D. Kane, T. Greaney, M. Shanahan, G. DuVy, B. Bresnihan, R. Gibney, *et al.* The role of ultrasonography in the diagnosis and management of idiopathic plantar fasciitis *Rheumatology (Oxford)*, 40 (2001), pp. 1002-1008 [View PDF](#) This article is free to access. [View in ScopusGoogle Scholar](#)
10. Morgan M. Anisotropy | radiology reference article | Radiopaedia. org. [Radiopaedia.org](#); 2016. Retrieved 14 May 2016, from <<http://radiopaedia.org/articles/anisotropy>>. [Google Scholar](#)