Zeeshan Safdar et al



## CODEN [USA]: IAJPBB

ISSN: 2349-7750

## INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

http://doi.org/10.5281/zenodo.3483359

Available online at: <u>http://www.iajps.com</u>

**Research Article** 

# A RESEARCH STUDY ON CHRONIC PAIN AND REGENERATIVE MEDICINE

<sup>1</sup>Dr. Zeeshan Safdar, <sup>2</sup>Dr. Bakhtawar Arshad, <sup>3</sup>Ayesha Majeed

<sup>1</sup>House Officer, DHQ Teaching Hospital, Gujranwala, <sup>2</sup>Nawaz Sharif Medical College, <sup>3</sup>Allama Iqbal Medical College.

Article Received: August 2019	Accepted: September 2019	Published: October 2019

### Abstract:

Severe pain is spreading now a day to a greater extent. But it has been observed that only few hospitals are present throughout the world to cure this disease. It has been estimated from a hospital of Pakistan that 667,000 person suffering from severe pain is present. It has become necessary to detect its treatment as well etiological factors. The treatment of the chronic disease can be tried by Robinson and Singh .They assesses three looms regarding this issue. The most easiest and simple method is the curative approach. Analgesic approach has been used to convalesce the patient. It works best when the pain mixed with purposes by giving momentary pain release. A trouble-freedextrose water solution injection should be applied on nerves in constant soreness syndrome. This may induce changes in substances P and CGRP. This process makes the part of regenerative approaches. This process of cure is more easy and protected as compare to pain prescription. The adverse effects of pain prescription is more dangerous than the treatment of the disease. Platelet rich plasma therapy is anther technique used for the treatment of the following disorder. We are trying to address the following two techniques phototherapy and platelet rich plasma. Because it can be seen that these may be the treatment of the disease. The worker team is trying to identify the proper cure for the disease not just treatment of the pain for temporary time period.

Keywords: Chronic Pain, Regenerative, Medicine.

**Corresponding author:** 

**Dr. Zeeshan Safdar,** *House Officer, DHQ Teaching Hospital, Gujranwala.* 



Please cite this article in press Zeeshan Safdar et al., A Research Study on Chronic Pain and Regenerative Medicine., Indo Am. J. P. Sci, 2019; 06(10). Zeeshan Safdar et al

### **INTRODUCTION:**

Chronic pain. Regenerative injection therapy. Pain medication, platelet rich plasma Phototherapy. Based on our livings conditions and background we recognize the pain according to the conditions. However, the patients who come to the hospitals just want to eliminate that pain. It has been reported by Sharman that in America about 100 million patients suffering from chronic pain were present. 150 programs to eliminate that chronic pain were available at that time. [1] Treatment approaches of these programs were different from each other. Here I am sharing the point of view of the Stenos and his colleagues. His perception was that the treatment can be transferred from mere analgesia to the other whose objective is to progress it functionally [2]. Because of this perception the treatment of the disorder is successful and a new hope of life was observed in patients. However in some patients hopelessness was observed by Haig and Grabios. The causes of this frustration are that the treatment is not present when it is needed. Anatomic identification was not clearly observed in the most common and effective method of the treatment. [3] So what should be the best option to do? Both the authors have point of view that the discovery of proper treatment is the first priority. [3] Only the efforts for a single time were not appropriate to pick up the solution. This approach is useful because it gives logic how to identify the chronic pain in patients. As a physician, I know that we have our different specificity of performance. I observed pain in lower back and joints of most of the patients. If a person comes to me and told me about the pelvic and abdominal pain I will definitely refer them to gynecologist because they can easily understand their issues. It has as being observed that some drugs shows some effectiveness. It can cause a big issue for us if we initiate the opioid or non-opioid treatment.

#### **DISCUSSION:**

For the control of chronic pain three methods were discovered by Robinson and Singh. These three procedures are as follows: curative modifying, rehabilitative and palliative. [4] Curative was the easiest method of control out of all the three. In the presence of two conditions rehabilitative method was used. When the cure can never be applied on patients and the main purpose is to make the patient healthy. During the real rehabilitation conference when pain makes the purpose and commotion thorny we use the palliative method. This method act as adjunct. We first completely observe the patient before treatment. Modern machinery has been used to observe the sports grievances, rhythmic and snowballing sprain injuries and chronic pain syndrome etc. These injuries may affect the muscles and bones, radiographic images, magnetic resonance images etc. [5] many of the patients are now cured from this disease completely. It has been noticed that excessive use of motor end plate irritability and acetylcholine removal with the consequence of muscle contraction can cause the myofacial pain syndrome. [6]In a process known as neurogenic inflammation removal of P and CGRP was observed from the sensory neurons. [7] Same results were fund in some others chronic conditions. Special remedies were given to the patients who were still suffering from disease after using the medicines too. [8]

Regenerative drugs provide better treatment in combating against chronic pain. New methods of treatment and therapies were discovered with fewer side effects. In addition to chances of musculoskeletal ultrasound as a contrivance for making instantaneous hallucination and thus determination for dinar musculoskeletal circumstances, the appliance of regenerative inoculation therapies make it more expedient. [5] However some confronts were present about its appliances by inadequate randomized prohibited test. Two essential regenerative inoculation methods were included here which were phototherapy and platelet rich plasma therapy.We use the 5% dextrose water as a negotiator in phototherapy. It can raise the location of chronic pains It has also been noticed that it express the proximal inflammation of an deceived nerve with obstruction of both intergrades and orthograde pour of essential materials inside the tangential nerve. It causes the soreness.

We can also transform the sodium and potassium through a receptor known as TRV1. This function is dependent on dextrose water. [9] Currently chronic lower back pain was studied by Mannequins Smigel. The importance of 5% water was shown in this study. [10] For the treatment of chronic osteoarthritis of knee [11] enthesopathy, tendinopathies and ligament injuries, [12] and carpometacarpal joint of the thumb [14] the better option is the phototherapy. From the alpha granules of the platelets platelet-rich plasma therapy was developed. This can be developed after the spinning methods of two steps. Different growth factors like platelet growth factor, epidermal growth factor, vascular endothelial growth factor, [5, 16] transforming growth factor-beta and refurbish the normal function. [17, 18, 19] After the 6 months of the injuries, the best therapy is the PRP. If more than two injections are needed for a patient the break of two weeks is so important. Due to various methods and preparations recently different results are obtained. [20] For the treatment of injury of sport

person we generally use PRP. Because it's healing is fast as compared to other methods. Information about the recent interventions of chronic pain is essential. Proper exercise and physical therapy is very important for the treatment. The character of Behavior and Cognitive therapies is also important for the treatment. The chronic pain in which joints, tendons and ligaments are involved can be treated by regenerative injection therapy. However its etiquette and steady consequences are not so well but still its usefulness cannot be neglected. It is necessary to address it first when we find the proper reason of chronic disorder.

#### **CONCLUSION:**

The most easiest and simple method is the curative approach. Analgesic approach has been used to convalesce the patient. It works best when the pain mixed with purposes by giving momentary pain release. A trouble-freedextrose water solution injection should be applied on nerves in constant soreness syndrome. This may induce changes in substances P and CGRP. This process makes the part of regenerative approaches. This process of cure is more easy and protected as compare to pain prescription. The adverse affects of pain prescription is more dangerous than the treatment of the disease. Platelet rich plasma therapy is anther technique used for the treatment of the following disorder. We are trying to address the following two techniques phototherapy and platelet rich plasma. Because it can be seen that these may be the treatment of the disease. The worker team is trying to identify the proper cure for the disease not just treatment of the pain for temporary time period.

#### **REFRENCES:**

- American Society of Anesthesiologists Task Force on Chronic Pain Management; American Society of Regional Anesthesia and Pain Medicine. Practice Guidelines for Chronic Pain Management: an updated report by American Society of Anesthesiologists Task Force on Chronic Pain Management and the American Society of Regional Anesthesia and Pain Management. Anesthesiology. 2010 Apr; 112(4):810833. [Pub Med] [Free full text] doi: 10.1097/ALN.0b013e3181c43103
- Laker S, Friedrich J, Stanos SP, Tyburski MD. Management of Chronic Pain. PM R. 2015 Nov: 7(11 Supple):S316-S323. [Pub Med] doi: 10.1016/j.pmrj.2015.09.017.
- Haig AJ, Gravois M. Chronic Pain: Cure it First, Treat it second. PM R. 2015 Nov: 7(11 Supple):S324-S325. [Pub Med] doi: 10.1016/j.pmrj.2015.07.016

- Robinson JP, Singh V. Chronic Pain. Phys Med RehabilClin N Am. 2015 May; 26(2): xiii-xvii. [Pub Med]
- Borg-stein J, Zaremski JL, Hanford MA. New concepts in the assessment and treatment of regional musculoskeletal pain and sports injury. PM R. 2009 Aug; 1(8):744-754. [PubMed] doi: 10.1016/j.pmrj.2009.05.013.
- Wu PI, Meleger A, Witkower A, Mondale T, Borg-Stein J. No pharmacologic Options for Treating Acute and Chronic Pains. PM R. 2015 Nov; 7(11 Supple):S278-S294. [PubMed] doi: 10.1016/j.pmrj.2015.09.008.
- Shah JP, Thaker N, Heimur J, Aredo JV, Sikdar S, Gerber L. Myofascial Trigger Points Then and Now: A Historical and Scientific Perspective. PM R. 2015 Jul;7(7):746-761. [PubMed] [Free full text] doi: 10.1016/j.pmrj.2015.01.024.
- Richardson JD, Vasko MR. Cellular mechanisms of Neurogenic Inflammation. J Pharmacologic ExpTher. 2002 Sep; 302(3):839-45. [PubMed] [Free full text]
- Lyftogt J. Pain conundrums: Which hypothesis? Central nervous system sensitization versus peripheral nervous system autonomy. Australasian Musculoskeletal Medicine. 2008; 13:72–74. [Free full text]
- Smigel LM, Reeves, KD, Rosen HJ, Lyftogt J, Coleman CG, Cheng AL, et al. Analgesic effect of caudal 5% dextrose in water in chronic low back pain (Abs). Arch Phys Med Rehabil. 2005; 96:e103. [Free full text]
- Distal LM, Best TM. Prolotherapy: A clinical review of its role in treating chronic musculoskeletal pain. PM R. 2011 Jun;3(6 Supple 1):S78-S81.. [PubMed]. Doi: 10.1016/j.pmrj.2011.04.003
- Topol GA, Reeves KD and Fullerton BD. Evidence-based regenerative injection therapy (prolotherapy) in sports medicine. In: PH Seidenberg, PIBeutler (Eds) the Sports Medicine Resource Manual. Saunders (Elsevier), St Louis, MO; 2008:611-619.
- Rabago D, Patterson JJ, Mundt M, Kijowsiki R, Grettie J, Segal NA, et al. Dextrose prolotherapy for knee osteoarthritis: A randomized controlled trial. Ann FAM Med. 2013 MayJun; 11:229-237. [PubMed] [Free full text] doi: 10.1370/afm.1504.
- Reeves, KD, Hassanein, K. Randomized, prospective, placebo-controlled double-blind study of dextrose prolotherapy for osteoarthritis thumb and finger (DIP, PIP, and trapeziometacarpal) joints: Evidence of clinical efficacy. J Altern Complement Med. 2000; 6:311-320. [PubMed] [Free full text]

- Nguyen, RT, Borg-Stein, J, McInnis Applications of platelet-rich plasma in musculoskeletal and sports medicine: An evidence-based approach. PM R. 2011 Mar; 3(3):226-250. Doi: 10.1016/j. pmrj.2010.11.007. [PubMed]
- Rabago D, Best TM, Zgierska, AE, Zeisig E, Ryan M, Crane D. A systematic review of four injection therapies for lateral epicondylitis: prolotherapy, polidocanol, whole blood and platelet-rich plasma. Br J Sports Med. 2009; 43: 471-481. Doi: 10.1136/bjsm.2008.052761. [PubMed] [Free full text]
- Yu W, Wang Jayne J. Platelet rich plasma: a promising product for treatment of peripheral nerve regeneration after nerve injury. Int JNeurosis. 2011; 121(4):17680. Doi: 10.3109/00207454.2010.54443. [PubMed]
- Zheng C, Zhu Q, Liu X, Huang X, He C, Jiang L, et al. Effect of platelet rich plasma concentrations (PRP) on proliferation, neurotrophic function and migration of Schwann cells in vitro. J Tissue Eng Regen Med. 2016 May; 10(5):428-36. Doi: 10.1002/term.1756. [PubMed]
- Sanchez M, Yoshioka T, Ortega M, Delgado D, Anitua E. Ultrasound-guided platelet rich plasma injections for the treatment of common peroneal nerve palsy associated with multiple ligament injuries of the knee. Knee Surg Sports TraumatolArthrosc. 2014 May; 22(5):1084-9. Doi: 10.1007/s00167-013-2479-y. [PubMed]
- 20. Dragoo JL. The Use of Platelet Rich and Platelet-Poor Plasma to Enhance Differentiation of Skeletal My oblasts: Implications for the Use of Autologous Blood Products for Muscle Regeneration. Orthop J Sports Med. 2016; 4(7 suppl4):2325967116S00150.

doi:10.1177/2325967116S00150.[Free full text]