

Evaluation of the Use of Suprahyal in the Painful Glenohumeral Joint in a Group of Patients Taken Randomly According to their Pathology and its Consequences the Posterior. 2016

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This study was done randomly and transversally in a group of patients who presented in the area of the consultation with different painful shoulder pathology and functional inability and we decided to experimentally place the synvisc in such articulation since viscosity is one of the most recent advances in painful joints adds viscosity and elasticity to the joint.

A group of 100 patients were taken 74 women and 26 men between the ages of 25 and 50 years with different work activities and without a history of base pathologies all patients were magnetic resonance and 10 of them had arthroscopy after the placement of the drug, for the non-improvement of pain and functional disability of the drug. Using a statistical and variable program as patients in stage i and ii of neer, in subacromial bursitis, capsulitis, in trauma and in meccanic causes. The results were quite interesting as a group of patients had improvement in a high percentage of 70% and 20% had no improvement and 10% was uncertain, patients who had arthroscopy were taken biopsy to see if there was any inflammatory reaction of the drug and we were also able to make an adequate scale for the placement by anterolateral way in the shoulder and the amount of medicine that should be used on the shoulder which is not it's the same as the knee joint which is why we used different doses until we see which one caused the desired effect of clinical improvement.

All variables were plotted and with respective legend and analyzed results.

New solution for shoulder injuries

Those with shoulder joint pathologies now have a medicine that regains mobility, relieves symptoms and delays the trip to the operating room for cases that warrant surgery.

The joints of our shoulders give us great mobility, such as turning our arms in 360 degrees, carrying heavy objects, or simply giving a hug and this is because they are among the most mobile structures of the body, after those present in the hips, the difference is that they are not so protected and that gives rise to the appearance of painful problems in this area, if we abuse their goodness.

Explains Dr. Fernando Gómez, traumatologist specializing in childhood orthopedics and shoulder pathologies, that in Venezuela conditions in this area type bursitis, tendinitis, subacromial grip syndrome and rotator cuff injuries are common.

Another interesting fact it provides is that 60 to 70% of pathologies of this type are suffered by women, the average age is at 30 years and the explanation about why they are the most affected lies in the work activities they perform, because housewives, seamstresses,

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dentists and secretaries have a lot of movement in the shoulder joint. In addition, ladies are predisposed to suffer from osteoporosis from hormonal changes typical of menopause, then they begin to lose calcium and suffer from osteoarthritis-like pathologies or osteoarthritis in the shoulder joint at approximately 40 years old, at which they are still at a very productive stage of their life. With regard to men, it is not that they are exempt from similar conditions, but since they usually work with more weight, the pathologies they present are traumatic type.

When they are well advanced, many of these problems require surgery, but for the early stages a team of doctors led by Dr. Fernando Gómez conducted a study with 25 patients, who were given synvisc medicine from the Novartis laboratory, whose fundamental use is for the knee joint and the finding was that 90% of people improved after the placement of the drug. These results will be presented at the Congress of Traumatology and Orthopedics and on them we will delve into the next lines.

About the study

The increasingly frequent arrival at the consultation of painful shoulder pathologies in young women between the age of 25 and 40 was the main motivation of Dr. Gómez and his team to test the drug in these patients, with a view to seeking relief from the discomfort caused by the disease. This drug has been used for 10 years in the country to treat knee conditions and since this joint has shoulder-like components, the question arose as to why not try it in this area at lower doses, seeing the clinical improvement shown by studies in patients with early stages of knee pathologies. A total of 25 patients with painful shoulder pathologies such as tendinitis, bursitis and clamping syndrome, who were in the early stages of Neer's disease or phases I and II, who participated in the study. In addition, they had imaging studies of MRI and x-rays.

"While doses of 2 cc of the medicine are placed intra-articularly in the knee for three weeks, on the shoulder we use between 0.75 and 1 cc for the same time". With respect to the drug location site, they began to place it in the anterolateral port, a common route through which arthroscopy is introduced, equipment similar to a laparoscope, which serves to repair injuries to the shoulder. It is important to note that the placement of the medicine is done in the operating room and using an image intensifier, portable x-ray equipment that allows to visualize the exact point of the shoulder where the dose will be administered. After the study, the researchers realized that 15 of the 25 patients studied improved immediately, which is why they underwent a diagnostic shoulder arthroscopy and showed that inflammation had decreased in this group and virtually the joint looked healthy.

In the rest of the patients studied where there was improvement in mobility, but followed the pain, they had a shoulder arthroscopy, as their condition was more advanced, but before and after surgery they were given the medicine and the surprise is that within a week of being intervened they were able to join their activities, as they had regained mobility and the pain improved, when normally after such an intervention the patient achieves full recovery in approximately one month.

"The results showed that of the 25 patients studied 90% improved with the placement of the drug, both those operated, and those in the early stages of their pathologies". It is worth noting that this is the first study to be conducted in Venezuela and Latin America on the use of the drug in painful shoulder conditions.

Drug benefits

In patients who have joint pathologies there is a decrease in hyaluronic acid, a substance that gives elasticity, viscosity and lubrication to the joint, thus allowing mobility.

This acid is present in each of the joints of our body and they are responsible for producing it, so in the face of the lack of it must compensate for this loss and the drug used for the study has as active substance the Hilagan GF 20, hyaluronic acid processed in the laboratory and that is extracted from the crest of the roosters. "The compound has a high molecular weight, even higher than that we have in our

joints and when placed stimulates the production of hyaluronic acid, while generating a buffer mattress that provides relief in the patient, because its joint is no longer colliding or rubbing with the tendon of the muscle or other joint, then the improvement occurs”, says Gómez. Indicates that the drug should be placed weekly for three weeks and the patient will then go to rehabilitation, then based on the results obtained the study is done, to determine if it needs arthroscopy or continues with anti-inflammatory drugs and the drug.

“The patient with the injury is given the drug and given a one-month chance to see if there is improvement, although it can be seen a week”.

It has been seen that the drug can be placed in the shoulder joint three times and then three times more, but more of that does not, because if the patient does not improve it is indicative that there is a larger lesion, then it is preferable to do the arthroscopy and place the medicine, so that it does that buffer mattress and does not cause further damage to the structure that was repaired. Gomez indicates that the advantage in using Hilagan GF 20 is that it improves patient activity and delays surgery, which people are usually afraid of, especially in the shoulder joint. However, for those cases where surgery is necessary, if the patient takes the forecasts should not suffer more of that problem, as the lesion was repaired, and the lost hyaluronic acid was provided.

“The drug has been used in patients who are baseballers, tennis players and maxillofacial surgery, cases where total improvement has been obtained.

In addition, Dr. Gómez and his team conducted another study, albeit lazy, with three patients who had osteoarthritis in the shoulder, who were given the drug and have regained their mobility and say they have no pain.

“They are 80-year-old elderly patients, who find it difficult to have surgery because they have cardiovascular problems. Regaining mobility is very important because it is a totally arthrotic joint and this is about improving its quality of life”.

Do not abuse your joint (DESPIECE).

Dr. Gómez explains that all shoulder pathologies can be prevented by living a healthy life, playing sport, because the more mobility the shoulder joint has, the more arthrotic injuries will be avoided. Feeding is important, as green vegetables and white meats increase hyaluronic acid production as well as egg consumption. With regard to ladies, they should try before menopause comes to take calcium supplements and exercise to avoid being a victim of osteoporosis, or osteoarthritis.

It is also important to keep these tips in mind:

- Taking care of injuries.
- Do not carry excess weight in the area.
- When carrying weight should be symmetrically.
- Temperature changes affect the shoulder joint, so you have to take forecasts in this regard.
- Do not abuse the shoulder joint, because although it is very mobile, it does not have many stabilizers, the shoulder is polished and can leave the joint cavity and if it comes out three times surgery is necessary.

Care problems (DESPIECE)

Within shoulder pathologies the most common is subacromial grip syndrome, where a grip of the acromion of the scapula occurs to the supraspine muscle, which is an important muscle, because it produces the rotation of the joint. There is also the rupture of the rota-

tor cuff, made up of four muscles (supraspine, infraspine, subscapular and smaller round) that are responsible for giving all the rotation to the shoulder. Of these four muscles, the one that tends to break the most is the supraspine. Other major injuries occur in the deltoid muscle that gives stability to the shoulder and allows it to rise and in the biceps tendon at the level of the glenohumeral joint. The latter is greatly suffered by people who work in construction, or those who work with weight, due to a rupture or injury that affects the shoulder, because the long part of this powerful muscle is inserted into the glenoid cavity of the shoulder. With regard to injuries caused by trauma, the labrum glenoid, an important anatomical piece that looks like a lash, stand out but gives stability to the shoulder and does not allow it to leave the joint. It is usually suffered by baseballers and basketball players.

Among the most specific injuries are those of Slap (Superior Posterior Anterior Labrum), which are difficult to repair and must be addressed by a pure shoulder specialist. There are other important injuries such as glenoid labrum and they are caused by trauma, usually baseballers and basketball players suffer from them. This is a part of the glenoid rim and is an important anatomical piece, because it is what gives stability to the shoulder and does not allow it to leave the joint. All these repairs can be done arthroscopically, the patient is less harmed, there is a lower risk of infection and recovery is faster.

Viscosupplementation treatment would be indicated in patients who the surgical intervention (total or reverse arthroplasty) is not clear or the reject, and in those in whom it is contraindicated The degree of decrease of pain is variable; in a review of non-surgical treatments of Shoulder Osteoarthritis, The American Academy of Orthopedic Surgeons supports the use of viscosupplementation with clinical studies On the other hand, the intra-articular use of hyaluronic acid is safe and has no the side effects of weakening of the cuff tendons rotators, fat atrophy and necrosis presented by corticosteroids, and has clearly shown a better and longer lasting clinical result than these Several authors have demonstrated the effectiveness in relieving pain, the scales assessment and mobility in chronic painful shoulder (including patients with rotator cuff tears, frozen shoulder, and arthro-shoulder sis), but there are already several that also demonstrate it in groups of patients with scapulohumeral osteoarthritis only.

Regarding the injection technique, there is a general consensus that the injection intra-articular injection is more likely to be correct when used ultrasound or fluoroscope. There are scientific studies comparing the use of platelet-rich plasma with that of intra-articular hyaluronic acid, but it is important to pay attention to what products compared, given the variability of the preparations. There are studies promising underway with the combined use of both.

Conclusion

Intra-articular injection of hyaluronic acid is an effective and safe alternative in the treatment of patients with osteoarthritis in the joint glenohumeral, especially in those in whom arthroplasty, when the waiting list is long or if the intervention is rejected.

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