



# Editorial

### *Pain Relief as a Human Right*

*"We must all die. But that I can save him from days of torture, that is what I feel as my great and ever new privilege. Pain is a more terrible lord of mankind than even death itself."*

**Albert Schweitzer**

The time has come. The problem is clear. Pain is a major public health issue throughout the world. The gap between an increasingly sophisticated knowledge of pain and its treatment and the effective application of that knowledge is large and widening. Both acute and chronic pain is often poorly managed for a wide variety of culture, attitudinal, educational, political, and logistical reasons. The setting up of a specialized pain management centre Delhi Pain Management Centre - is one step towards achieving the objective of providing specialized pain relief treatment methods at one place.



**Dr. G.P. Dureja**

### *Why Relieve Pain?*

Unrelieved Pain has major negative effects on the lives of millions of people in our country and is associated with high cost involved in its treatments. Persistent pain and many physical and psychosocial changes and complications associated with it constitute a major health care problem. Chronic pain is now considered as a *disease* in its own right.

In India, chronic pain affects approximately 30% of the adult population, particularly women and elderly. About 20-25% of this population suffer pain from musculoskeletal and joint disorders. Back pain accounts for another 25-30 %. Headache and migraine accounts for about 5% of cases of persistent pain. In only 1-2 % of adults with chronic pain does the pain result from cancer. Trigeminal neuralgia, post herpetic neuralgia and other neuropathic pain syndromes constitutes another 5-7 % of patients suffering from Chronic pain.

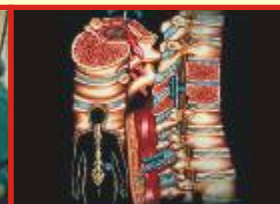
### India's first dedicated Pain Management Centre Providing:

- Fluroscopy/CT Guided Interventions*
- Ozone discectomy*
- Radiofrequency/Pulse RF Ablation*
- Botox Injection Therapy*
- Spinal Cord Stimulator Implant*
- Intrathecal Pump Implant*
- Domiciliary Cancer Pain Programme*
- Ultra modern physiotherapy fascility*

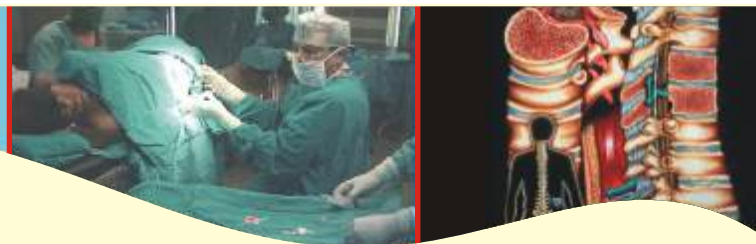


## Delhi Pain Management Centre

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## Interventional Pain Management



Interventional Pain Management mainly denotes the use of '**Invasive Procedures**' for diagnosis as well as treatment of pain. These could be as simple as a trigger point injection or as complex as a percutaneous discectomy or a vertebroplasty. Over the past years, the role of an Interventional Pain Specialist has been getting closer to a surgeon rather than a physician.

### **Nerve Blockade in Chronic Pain Management**

Despite the misgivings about the rational basis for interventions in chronic pain management, nerve blocks still are important therapeutic modalities because experience and evidence has demonstrated that significant number of patients do gain considerable benefit.

**Sympathetic Blockade** :Sympathetic nerve blocks are used for pain due to vascular insufficiency, visceral pain, and pain that is thought to have a sympathetic component. Neurolytic and Radiofrequency lumbar sympathetic plexus ablation relieve pain at rest and improve healing of skin ulcers in patients with atherosclerosis, diabetes, Buerger's disease.

**Cranial Nerve Blocks** :The cranial nerves are frequent targets for nerve blocking techniques. Blocks for Glossopharyngeal neuralgia, occipital neuralgia and sphenopalatine neuralgia, Glycerol and alcohol injections of the Gasserian ganglion and radiofrequency lesioning have been used successfully by us for trigeminal neuralgia and cluster headaches.

### **Interventions for Spinal Pain**

Injection therapy with local anaesthetics and steroids is the mainstay in managing chronic back pain due to a variety of causes. Some of the newer interventions in this area are as follows.

**Facet Joint Injections and Denervation** : Facet joint injections and facet joint denervation continue in the repertoire of many pain practitioners. Our experience has shown the effectiveness of facet blocks and Radiofrequency medial branch denervation in managing low back pain.

**Root Sleeve/Transforaminal Injections** : Selective nerve root injections of corticosteroids are significantly more effective than interlaminar approach of epidural steroids. The use of fluoroscopy for perineural or transforaminal injection is essential to ensure that the needle is as close to the affected nerve root as possible .



*Transforaminal (Root sleeve)  
Epidural injection*

**Ozone Discectomy (Nucleolysis)** : Chemiodiscolysis or discectomy with an intradiscal injection of Oxygen-ozone mixture has added a new dimension to the percutaneous interventional procedures for disk herniation and protrusion. These techniques have minimized the invasive nature of surgery and avoid or decrease complications like infection linked to surgery. Our experience in 1290 patients has revealed that an

intradiscal ozone injection reduces the herniated and protruded nucleus pulposus by over 70% in 5 weeks period. Over 87% patients were pain free within 4 weeks of the intervention and the procedure carried no major risk or untoward effects.



*Intradiscal Ozone injection  
for Nucleolysis*

**Radio Frequency Lesioning in Pain Management** :An advanced method used for neuroablation is Radiofrequency ablation of somatic and sympathetic nerves/plexus, cranial nerves and splanchnic nerves. Radiofrequency treatment now allows a targeted and selective intervention and is slowly replacing the conventional neurolytic block procedures. Trigeminal Neuralgia, Peripheral vascular diseases, Cancer pain, atypical orofacial pain, spinal pain such as facet arthropathy, sacroiliac pain, complex regional pain syndrome (CRPS) are some of the chronic pain syndromes where radiofrequency neuroablation has resulted in satisfactory to excellent pain relief.

**Spinal Cord (Dorsal column) stimulation (SCS)** is a neuromodulatory interventional modality used for relief of vascular and intractable neuropathic pain. Once the trial stimulation is successful in relieving pain, a permanent stimulation device is then implanted and controlled by an external programmer. Although expensive, dorsal column stimulation is often the only solution to pain syndromes such as deafferentation pain, phantom limb pain, vascular pain and sympathetically mediated pain state .

### **Implanted Intrathecal Pumps in Cancer Pain**

Perhaps one of the frontrunners in the technological advances in cancer pain management has been the **Implanted Intrathecal pumps** which allow a continuous flow of opioids such as morphine into the cerebrospinal fluid and resulting in an extraordinary degree of pain free state. Terminal cancer patients with a life expectancy of more than 6 months are ideal for such modalities as it causes a complete relief of pain and a significant improvement in the quality of life in the terminal period of life.

A lot has been achieved to conquer the chronic intractable pain with the help of interventional pain management techniques and other support adjunctive modalities. We hope that in future the patients who are not treatable by the existing techniques will be benefited by further inventions in the field of interventional and non interventional pain management techniques.

### **Global Initiative Targets Pain in Women**

#### **Did you know that?**

- While chronic pain affects a higher proportion of women than men worldwide, women are less likely to receive treatment.
- Research shows that women tend to have more recurrent, severe and long lasting pain than men.
- Many pain conditions are far more prevalent in women than in men.
- Women's pain has a significant global impact, but a lack of awareness persists.



## Herniated Disc: Non-surgical Treatment First

Fortunately, the majority of herniated discs do not require surgery. However, a very small percentage of people with herniated, degenerated discs may experience symptomatic or severe and incapacitating low back pain which significantly affects their daily life. The initial treatment for a herniated disc is usually conservative and nonsurgical. Your doctor may prescribe bed rest, or advise you to maintain a low, painless activity level for a few days to several weeks. This helps the spinal nerve inflammation to decrease.

A herniated disc is frequently treated with nonsteroidal anti-inflammatory medication if the pain is only mild to moderate. A Transforaminal epidural steroid injection may be performed utilizing a spinal needle under x-ray guidance to direct the medication to the exact level of the disc herniation. Introduction of Ozone in the herniated disc (ozone discectomy) can shrink the prolapsed or the herniated portion of the disc thus curing the problem.

Physical therapy (Physiotherapy) is also recommended by the doctors. The therapist will perform an in-depth evaluation; which combined with the doctor's diagnosis, will dictate a treatment specifically designed for patients with herniated discs. Therapy may include lumbar traction, gentle massage, ice and heat therapy, ultrasound, electrical muscle stimulation, and stretching exercises. Pain medication and muscle relaxants may also be beneficial in conjunction with the physical therapy.

Your doctor may recommend surgery if conservative treatment options, such as physical therapy and medications do not reduce or end the pain altogether. He will talk to you about the types of spinal surgery available, and depending on your specific case, will help to determine what procedure might be an appropriate treatment for you. As with any surgery, a patient's age, overall health, and other issues are taken into consideration when surgery is considered.

The benefits of surgery should always be weighed carefully against its risks. Although a large percentage of patients with herniated discs report significant pain relief after surgery, there is no guarantee that surgery will help every individual.

## Physiotherapy Goals - Basic Exercises and your Back's Health

**Goals of Physical Therapy :** The long-term goal of Physical Therapy is to teach the patient how to manage and/or alleviate the current symptoms and how to prevent future episodes of pain from recurring. Other functional goals are made based on the patient's specific complaints, whether they be an inability to sleep through the night without pain, stand/walk for daily activities or exercise, sit for an extended period of time, or turn the head adequately for driving. Specific goals to increase the strength or flexibility of specific sources of pain are then made to facilitate the functional goals.

**Examples of Basic Exercises :** As noted previously, specific exercises for the neck and back are chosen by the PT based on the individual's specific problem and areas of deficit noted on exam. The exercises are also carefully monitored to ensure proper form and technique to facilitate the desired outcome before they are issued for the home program. In short, not every exercise is right for every back or neck pain.

PT exercises for the back tend to focus on improving the flexibility and strength of the trunk. For example, lower abdominal strengthening is often a goal to facilitate better support to the lower back.

- 1.) Strengthening is usually started lying on the back with the knees bent.
- 2.) Tighten and pull in the lower abdominals. Think about drawing the belly button and the muscles below it toward your spine.
- 3.) The breath should not be held with this exercise. Counting out loud to 10, tightening the lower abs when you say 3, can facilitate normal breathing. This abdominal "bracing" is the foundation for other exercises to help stabilize the lumbar spine. Once bracing is mastered, the exercise can be appropriately progressed by the PT to include adding resistance with various arm and/or leg lifts while maintaining the taut abdominals and neutral spine in various positions.

Back strengthening exercises might include lying on the stomach, with or without a pillow under the pelvis. Depending on the person's ability, he or

she might be instructed to place both arms overhead like superman flying and alternate lifting one arm at a time without shrugging. This might be progressed to lifting on leg (thigh and all) at a time and finally progress to lifting the opposite arm and leg at the same time.

Stretching exercises might include lying on the stomach and performing a press-up, keeping the hips on the floor (Figure A). Or, depending on the specific pain pattern, the person might be instructed to lie on the back and pull the knees up toward the chest.



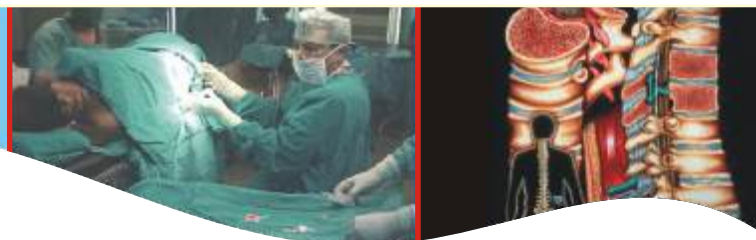
Exercises for the neck often focus not only on basic range of motion, but also on specific neck stretches and strengthening exercises, especially of the supporting postural muscles.

Sitting up straight, keeping the chin LEVEL, gently pull the chin straight in as if you are hiding against a wall or sideways behind a tree. Your head should not bob up or down. The back of your neck should feel long. The highest point of your body should be the top back or your head. This is a good postural correcting exercise to perform during the day, for example while doing computer work.

Finally, a really good postural exercise is called the breastbone lift. In sitting, practice lifting your breastbone a couple of inches. As you lift, gently

squeeze your shoulder blades DOWN and together. Sometimes it is helpful to picture a string tied to the top 2nd or 3rd button on a shirt, pulling straight up to the ceiling. Doing this breastbone lift/shoulder blade depression repeatedly helps to correct your posture and strengthen the lower trapezius muscles, which "anchor" you in a good sitting position.

**In Conclusion** The role of physical therapy in improving the health of your neck and back is first and foremost to educate you on what is going on that might be contributing to your pain and what you can do about it. Understanding and recognizing the contributing factors to your pain are the first steps to controlling it. Follow-through with postural awareness and the appropriate exercises is the key to recovery and prevention of future problems.



## What is Fibromyalgia?

Fibromyalgia Syndrome (FMS) is a chronic pain condition whose main features are wide spread, disabling musculoskeletal pain and tenderness accompanied by a number of other clinical symptoms such as prolonged morning stiffness, numbness in hands feet, throbbing headaches, daytime tiredness, irritability and memory loss (Table). Our data has shown a prevalence rate of approximately 2-4 % but with growing awareness of the disease the frequency rates are increasing. This disease is significantly more common in women than men (9:1). The most important consideration for the patient as well as the treating doctor is the substantial impact of fibromyalgia on an individual's quality of life and physical function.



Fig: Location of Trigger Points in fibromyalgia

### Table: Signs / Symptoms of Fibromyalgia Syndrome

- 1) Widespread Musculoskeletal pain of more than 3 months duration
- 2) Tenderness in at least 11 out of 18 tender points (Te Ps) The location of Te Ps is Shown in the adjoining figure.

## Managing Pain in fibromyalgia

FMS does not threaten patients lives but can cause severe disability and this compromise their quality of life. After a comprehensive evaluation of pain and psychosocial aspects, both drugs and non pharmacological interventions are used. Drugs like Tramadol, Amitriptyline, Duloxetine and thiocolchiside have evidence based role in relieving pain.

The present focus is on **Pregabalin** in a dose range of 300 450 mg/day which by our clinical data effectively reduced pain and accompanying symptoms of over 70 % of patients with FMS. This drug represents an important step forward in FMS treatment.

Muscle strengthening exercises, heated pool hydrotherapy, relaxation exercises and psychological support are important adjuncts with drug therapy. Trigger points injections with bupivacaine are useful in acute exacerbation of FMS. Intravenous Lidocaine infusion also seems to offer an important role in inhibiting central sensitization process, however, its long term effectivity is still being evaluated by us.

**Occipital Nerve Stimulation Found To Be Safe, Effective Treatment For Chronic Headache**  
*Our Experience has shown that patients suffering from chronic migraine headaches who have found no relief through the use of medications may find hope through occipital nerve stimulation (ONS). This therapy involves placing electrodes just beneath the skin in the vicinity of Occipital Nerves and then connecting it to the pulse generator device.*

**Pain Education initiative in collaboration with Aesculap Academy**  
Delhi Pain Management Centre and Aesculap Academy in an effort to propagate Pain Medicine as a superspecialty offer a 2 weeks full time Certificate course in **Pain Medicine and Regional Anaesthesia**. The course is conducted in batches of 3 and approximately 8 batches are conducted in a year.  
The course is open to physicians with postgraduate qualifications in any of the following specialties; Orthopedics, Neurology, Rheumatology, Anesthesiology, Neurology, Psychiatry and Rehabilitation. For more details and application form kindly log on to [www.pain-india.com](http://www.pain-india.com) or email to [gp dureja@gmail.com](mailto:gp dureja@gmail.com)

**“Allowing millions of people to suffer unnecessarily when their pain can be effectively treated violates their right to the best possible health.”**

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