



Internationally indexed journal

Indexed in Chemical Abstract Services (USA), Index copernicus, Ulrichs Directory of Periodicals, Google scholar, CABI ,DOAJ , PSOAR, EBSCO , Open J gate , Proquest , SCOPUS , EMBASE ,etc.



Rapid and Easy Publishing

The "International Journal of Pharma and Bio Sciences" (IJPBS) is an international journal in English published quarterly. The aim of IJPBS is to publish peer reviewed research and review articles rapidly without delay in the developing field of pharmaceutical and biological sciences



Pharmaceutical Sciences

- Pharmaceutics
- Novel drug delivery system
- Nanotechnology
- Pharmacology
- Pharmacognosy
- Analytical chemistry
- Pharmacy practice
- Pharmacogenomics



Biological Sciences

- Polymer sciences
- Biomaterial sciences
- Medicinal chemistry
- Natural chemistry
- Biotechnology
- Pharmacoinformatics
- Biopharmaceutics
- Biochemistry
- Biotechnology
- Bioinformatics
- Cell biology
- Microbiology
- Molecular biology
- Neurobiology
- Cytology
- Pathology
- Immunobiology

**Indexed in Elsevier Bibliographic Database
(Scopus and EMBASE)**

SCImago Journal Rank 0.288

Impact factor 5.121*

Chemical Abstracts
Service (www.cas.org)



A division of the American Chemical Society

CODEN IJPBJ2



Elsevier Bibliographic databases (Scopus & Embase)

SNIP value – 0.77

SJR - 0.288

IPP - 0.479

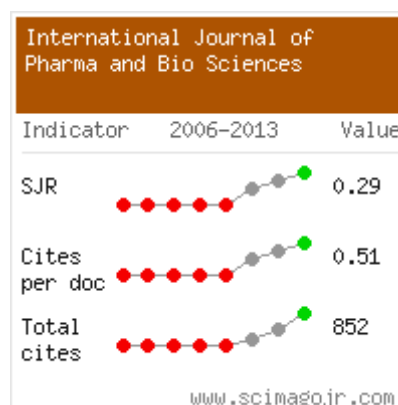
SNIP – Source normalised impact per paper

SJR – SCImago Journal rank

IPP – Impact per publication

Source – www.journalmetrics.com

(Powered by scopus (ELSEVIER))



LUND
UNIVERSITY



JACKSONVILLE STATE UNIVERSITY

Jacksonville State University
Houston Cole Library
USA (Alabama)



UNIVERSITY OF
OXFORD

Oxford, United Kingdom



*And indexed/catalogued in
many more university*



*Instruction to Authors visit www.ijpbs.net

For any Queries, visit "contact" of www.ijpbs.net



C-ARM GUIDED COELIAC PLEXUS BLOCK FOR MALIGNANT NEOPLASTIC LESION OF SUPRARENAL GLAND

DR. SHIVANAND LK¹, DR.PRATIBHA S.D² AND DR. VIDYA A.PATIL³

¹*Dr Shivanand L Karigar. Assistant professor , Department of Anaesthesiology , BLDE, vijaypur .*

²*Dr Prathiba S.D. Assistant professor , Department of Anaesthesiology , BLDE, vijaypur .*

³*Dr Vidya.A.Patil. Professor, Department of Anaesthesiology, BLDE, vijaypur .*

ABSTRACT

A 65 year old female presented with pain abdomen and was diagnosed to be having a malignant suprarenal gland tumour . Patient was not relieved of pain with conservative management, therefore coeliac plexus block under C- ARM guidance was planned. Coeliac plexus blockade with local anaesthetic (LA) was introduced as early as in 1914.¹ Indications for coeliac block- Abdominal pain of neoplastic/non malignant origin, Acute pain secondary to arterial embolisation of the liver (cancer therapy), Neurolysis of coeliac plexus to palliate pain of retroperitoneum/upper abdominal malignancy. Diagnostic coeliac plexus block given with 15 ml 0.5% bupivacaine under C-ARM guidance and patient was relieved from pain for two days. Later therapeutic block was given with 20 ml of 50% of absolute alcohol on each side under C-ARM guidance. Patient was relieved from pain and followed up for one week and discharged satisfactorily. Conclusion: Coeliac plexus block can be used as a sole pain relief technique for suprarenal gland malignant tumour

KEY WORDS: COELIAC PLEXUS BLOCK, MALIGNANT LESION, C-ARM.

*Corresponding author



DR. SHIVANAND LK

Dr Shivanand L Karigar. Assistant professor, Department of Anaesthesiology , BLDE, vijaypur .

INTRODUCTION

Coeliac plexus blockade is an injection of steroids with or without local anaesthetic for temporary pain relief, but coeliac plexus neurolysis refers to chemical neurolysis of the afferent pain fibres that transmit pain from intraabdominal viscera. Injection of neurolytic agent such as ethanol or phenol with a local anaesthetic is done to permanently destroy nerve fibres. A 65 year old female presented to the hospital with pain abdomen since two days. Pain was sudden in onset with colicky type and not associated with food intake. Patient gives history of loss of weight. There was no history of nausea, vomiting, constipation and diarrhea. Patient had similar complaints in the past and was not relieved by any medications. Pain was assessed by VAS (Visual analogue scale) scoring system. On examination of cardiovascular, per abdomen and respiratory systems clinically no abnormality detected. Investigations- CBC, RBS, Blood urea, Serum creatinine, Platelet count, ESR were within normal limits. Serum amylase was raised, serum lipase was normal. USG Abdomen showed a large (8x5cms) irregular heterogenous soft tissue tumor with few areas of intra-lesion necrosis in the left supra-renal region. On colour Doppler lesions appeared hyper-vascular, features, suggested left supra-renal gland malignant lesion. FNAC was done for left adrenal mass under USG Guidance. Microscopy showed positive for malignant cells suggestive of carcinoma. CT scan of abdomen and pelvis revealed large, well defined, lobulated soft tissue mass lesion in left supra-

renal region with its morphology and imaging features consistent with a malignant neoplastic lesion of left adrenal origin. Acute pain management was planned with epidural analgesia. Epidural catheter was placed for pain at L1-2 space and catheter fixed at 11 cm and relieved from pain for three days by administering 2ml of 0.5% bupivacaine and buprenorphine 60µgm three times/day. VAS score was 9 before the block and VAS score was 2 after the block. Patient was taken for diagnostic coeliac plexus block as the therapeutic block was planned for pain relief. Patient had been explained about the procedure and consequences, informed consent was taken. 20 G, intravenous line was secured and patient shifted to the operation theatre and all basic monitors were connected. Under all aseptic precautions, patient was placed in prone position. Body of L₁ was identified with C-ARM guidance, Urograffin dye (5ml) was injected through sterile 23G spinal needles on each side. 10ml of 0.5% bupivacaine was injected on either side. Patient was monitored, procedure was uneventful. Pain was relieved till next day. After three days patient was taken up for therapeutic coeliac plexus block. In prone position L₁ was identified and urograffin dye (5ml) was injected through 23G needle on each side under C-ARM. 20ml of 50% absolute alcohol was injected on either side. Patient was monitored and procedure was uneventful. Patient had pain relief and patient was followed up after 2 months.



Figure
C-ARM guided injection of urograffin dye.

DISCUSSION

Percutaneous anterior approach described by Wendling in 1917² and the posterior crural approach was described by Kappis in 1919 and later techniques became the standard. Indications for coeliac plexus block-Raynauds phenomenon, phantom limb, pancreatitis, angina abdominis and malignancy. Injectate-Alcohol in 50-100% is the neurolytic drug of choice, its mechanism of action is by extraction of cholesterol, phospholipids and cerebositides from the neural membrane and precipitation of lipoproteins and mucoproteins³ Phenol \geq 5% in water causes protein coagulation and necrosis when applied directly to the nerves, it has slightly slower onset of action, less efficacy and shorter duration⁴. Phenol also seems to have higher affinity for vascular tissues which rises its concerns over its use in proximity to major blood vessels.

Complications

Hypotension and pain on injection are the most common complications. Percutaneous anterior approach has success rate of 67% - 78%⁵. Supine position is more comfortable than prone position. Success rate of transaortic technique is 85%-93%⁶. It is difficult to determine the incidence of neurological complications. Partial or Total motor paralysis may be due to unintentional Subarachnoid or epidural injection. If a major feeder artery to the spinal cord is thrombosed paraplegia may occur. Effects of treatment depend on VAS pain scores. WHO 3 step ladder pain management is not helpful in many cases due to unacceptable side effects and non-response to drugs. In such cases alcohol nerve block is indicated.

CONCLUSION

Coeliac plexus block can be used as a sole therapeutic modality for pain relief in suprarenal malignant tumor without any significant adverse effects.

REFERENCES

1. Sankalp.S,Ahmed.G.Neurolytic coeliac plexus block for pancreatic cancer pain . A review of literature .Indian journal of pain//vol 27/issue3 P,121-131,Sept 2013.
2. Pradeep J,Amitab D, Jayshree S. Coeliac plexus blockade and neurolysis. Ind J Anaesth; 50(3);169-177,2006.
3. Jones J,Gough D.Coeliac plexus block with alcohol for relief of upper abdominal pain due to cancer. Ann Rev Coll Surg Eng :59:46-49,1977.
4. Francois F,Geraint Lewis.Coeliac plexus block for chronic pain syndromes .Review article.Can J Anesth 40:10/954-63/1993.
5. Modl F Aquaeous solution of phenol as substitute for alcohol in sympathetic block.J Int.Coll Surg.13:566-8:1950.
6. IschiaS, Luzzani A,Ischia A,Faggion S. A new approach to the neurolytic block of the celiac plexus: the transaortic technique.Pain 16:333-41:1983.
7. Lieberman RP,Nance PN,Cuke DJ.Anterior approach to celiac plexus block during interventional biliary procedures.Radiology 167:562-4:1988.