Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/18196
DOI URL: http://dx.doi.org/10.21474/IJAR01/18196

RESEARCH ARTICLE

AYURVEDIC MANAGEMENT OF BRACHIAL PLEXOPATHY: A CASE REPORT

Dr. Siddaram Guled[1] and Dr. Sumayya Iqra[2]

1. Assistant Professor, Department of Kayachikitsa, Government Ayurveda Medical College and Hospital, Mysuru.
2. Second Year Postgraduate, Department of Kayachikitsa, Government Ayurveda Medical College and Hospital, Mysuru.

Manuscript Info

Manuscript History
Received: 16 November 2023
Final Accepted: 21 December 2023
Published: January 2024

Key words:-
Brachial Plexopathy, Apabahuka, Vata, Amsa

Abstract

Background: The Brachial Plexopathy is a condition characterized by a lesion of the brachial nerve plexus. Depending on the aetiology, brachial plexopathy is classified as post-traumatic, infectious, toxic, compressiom-ischaemic, dysmetabolic and auto-immune. Among the causative factors, injuries are the most common. Symptoms include numbness, paraesthesia, weaknessin shoulder, arm and hand. Based on the references in Ayurvedic literature it can be correlated to Apabahuka.

Case Presentation:A 51-year-old male patient with the diagnosis of brachial plexopathy reported to OPD with complaints of weakness of right upper limb for 8 months associated with stiffness of right shoulder joint. The patient was treated with Ayurvedic therapeutic interventions such as nasya karma, greeva basti, Sthanika seka, sarvanga abhyanga and sarvanga shashtika shaali pindasweda, sthanika upanaha swedaalong with Vatakaphahara and Vataharashamanoushadhiswere prescribed.

Conclusion: After 15 days of treatment, there was marked relief in the symptoms in the form of reduced weakness and stiffness of right upper limb. The above treatment protocol along with oral medications has shown significant result clinically in the present study.

Introduction:-

Brachial Plexopathy is a neurologic affliction that causes pain or functional impairment (or both) of the ipsilateral upper extremity[1]. Brachial plexus is formed by C5, C6, C7, C8 and T1 and it supplies afferent and efferent nerve fibers to the chest, shoulder, arm, forearm and hand. Among the causative factors, injuries are the most common. Damage to the plexus is possible with a fracture of clavicle, dislocation of the shoulder, damage to the ligaments or tendons of the shoulder joint. Other causes include neoplastic infiltration, infection, immunological or metabolic disease, damage from radiation therapy, or genetic disease[2].Symptoms include numbness,paresthesia, pain, weakness in shoulder, arm and hand[3]. Based on the references in Ayurvedic literature it can be correlated to Apabahuka. Apabahuka is a Vata Nanatmaja vyadhi which affects the amsa desha causing shoshana of amsa bandhana and sankocha of siras leading to apabahuka[4]. Marmabhighata is one of the causative factors of vatavyadhi, the trauma to amsa marma causes loss of functions of bahu and becomes stiff or rigid which resembles symptoms of apabahuka[5]. Treatment options include analgesics, physiotherapy, occupational therapy, braces/splints, nerve block

Corresponding Author:- Dr. Sumayya Iqra
Address**:-** Department of Kayachikitsa, Government Ayurveda Medical College and Hospital, Mysuru.

to reduce pain and surgical correction. However, these first and second-line treatment options come with considerable side effects or give temporary relief. The case was treated with Ayurvedic therapeutic interventions such as nasya, abhyanga and sweda along with Vatakaphahara and Vataharashamanoushadhis which gave significant improvement in symptoms and quality of life.

Case Report:
A 51-year-old married man, previously employed as a painter, belonging to middle economic class, with no known history of any co-morbidities came to the OPD of hi-tech Panchakarma Hospital, Mysore with complaints of weakness and tingling sensation of right upper limb associated with stiffness and pain of right shoulder joint since 8 months.

Patient gave past history of right shoulder dislocation 25 years ago, for which he was treated with non-surgical treatments, details of which were not available with the patient. After recovery, patient continued to work on his job as a painter. He gradually started experiencing pain and tingling sensation of right upper limb which used to be relieved on rest. With more workload, he developed weakness in his right arm and forearm which hindered his routine work. There was worsening of the above symptoms causing difficulty in working, raising his right hand, buttoning/unbuttoning of shirt and eating food.

Patient consulted a neurologist for the above said complaints, wherein after clinical examination, routine investigations, NCS and MRI Scan, he was diagnosed with Brachial Plexopathy and was treated with IV steroids and physiotherapy for 6 days and continued with oral steroids and multivitamins on discharge. There was no relief in the patient's symptoms. After this, Patient came to Hi-tech Panchakarma Hospital, Mysuru for further treatment.

Clinical Findings:
Clinical examination showed no abnormality in cranial nerves, higher mental functions were intact. Examination of right shoulder joint revealed local tenderness, Stiffness and muscle wasting with range of movements painful and restricted. Upper limb Reflexes were within normal limits. Muscle power in right upper limb was 4/5 (diminished). Details of the clinical findings are described in Table 1.

	Right Shoulder	Left Shoulder
Redness	-	-
Swelling	-	-
Muscle Wasting	++	-
Local Temperature	-	-
Tenderness	+	-
Range Of Movements	Painful + Restricted ++	No pain No restriction
Muscle Power	4/5	5/5

Investigations:
NCS- Motor nerve conduction studies of Right Musculocutaneous, Axillary & Supra scapular nerves showed reduced CMAP amplitudes.

MRI Scan of Brachial Plexus with Contrast- C4-C5 & C5-C6 mild disc bulge noted causing anterior thecal sac indentation, C6-C7 disc desiccation noted. Diffuse posterior disc bulge noted causing anterior thecal sac indentation and mild cord indentation.
Hb- 14.6g/dL. The rest of CBC was within normal limits.
RBS- 122mg/dL
Serum Urea- 27mg/dL
Serum Creatinine- 1.13mg/dL

Management and Outcome:
The Ayurvedic treatment was administered in the form of Greeva Basti, Sthanika Seka, Nasya, Sarvanga Abhyanga, Shashtika shaali pinda sweda and Upanaha. Shamanoushadhi were also administered during the course of treatment in hospital. The therapeutic interventions and their timelines are described in Table 2.

Date	Treatment	Details
12/11/22 to 26/11/22	Greeva Basti	Ksheerabala taila and Ashwagandha taila
12/11/22 to 15/11/22	Sthanika Seka to Greeva and Prushtha	Dashamula kwatha
13/11/22 to 20/11/22	Nasya	Neurocare drops- 6 drops in each nostril
15/11/22 to 17/11/22	Sarvanga Abhyanga	Ksheerabala taila
15/11/22 to 17/11/22	Shashtika Shaali Pinda Sweda	Bala moola kwatha ksheerapaka
18/11/22 to 26/11/22	Upanaha sweda to right shoulder and arm	Upanaha choorna+Ksheera+Takra
Oral Medications		
1. Uttarabhaktika Snehapana with Panchatikta Guggulu Ghrita 10 ml after breakfast		

The details and dosage of advice on discharge are described in Table 3.

1. Sthanika Lepa to right shoulder with Upanaha Choorna+Ksheera+Takra
2. Trayodashanga Guggulu 1-0-1 After food
3. Rasna Sapthaka kwatha 10ml-0-10ml After food
4. Laghu Soota Shekhara Rasa 1-0-1 Before food
5. Capsule Gandha taila 1-0-1 After food
6. Uttarabhaktika Snehapana with Panchatikta Guggulu Ghrita 10ml after breakfast

The outcomes were measured with evaluation of range of movements Fig.1 . Significant improvement in clinical outcomes with respect to ROM was obtained after completion of therapeutic intervention. The patient could lift his right arm and there was reduced stiffness of the right shoulder joint. Muscle power was improved to 5/5.

Fig.1ROM

BEFORE AFTER

Discussion:-

Apabahuka is a VataNanatmajaVyadhi which affects the Amsadesha (Shoulder region) causing shoshana of AmsaBandhana (Shoulder joint) and sankocha of siras leading to Apabahuka. Marmabhighata is one of the causative factors of vatavyadhi, the trauma to Amsamarma causes loss of functions of bahu and becomes stiff resembling symptoms of Apabahuka. The features of associated pain and tingling sensation can be attributed to the cervical spine disc pathology which can be correlated to the symptoms of Vishwachi. Vishwachi is also one of the VatajaNanatmajaVyadhi wherein because of khavaigunyain greeva, Vata gets lodged in greevasandhi causing shoshana of shleshakakapha in-turn leading to dushti of kandara of bahu[6]. In both these conditions, Vata and

Vatakaphahara line of treatment can be adopted. Nasyakarma is a treatment modality best suitable as it is indicated in UrdhwajathrugataRoga with specific indication in both Greeva and Amsaroga[7]. Greevabasti with Vataharataila does both Snehana and swedana at the affected site to pacify Vata. Bahyaupakramas to shoulder joint was started with the intention of performing Rukshanakarma to alleviate Kapha without provoking Vata followed by Brimhanakarma for Snehana and Poshana of Amsadesha. Rukshana was done with Dashamoola[8]Kashayaparisheka which has Shoolahara and Shothahara properties. This was followed by Brimhana withAbhyanga and Shashtikashaalipindasweda to mainly target Vata as well as Shosha of the affected area. Upanahakarma was done with Upanahachurna which comprised of Masha, Vacha, Devadaru, Rasna etc Vata/Vatakaphaharadravyas along with takra and ksheera which alleviates pain and stiffness due to its Swedana property as well as shoolahara action of the drugs. Oral medications RasnaSapthakaKashaya and TrayodashangaGuggulu was given mainly for Pachana, Gandhataila for Poshana of asthidhatu, UttarabhaktikaSnehapana[9] with PanchatikthaGugguluGhrita as this type of Snehana is specifically indicated in Apabahuka. The Comprehensive line of treatment was thus adopted in the management of Apabahuka and Viswachi.

Conclusion:-

Ayurvedic therapeutic interventions along with oral medicines was beneficial in improvement of the symptoms in Brachial Plexopathy. The results obtained from this treatment show that further research can be undertaken based on this treatment plan for Ayurvedic management of Brachial Plexopathy.

References:-

1. Tharin BD, Kini JA, York GE, Ritter JL. Brachial plexopathy: a review of traumatic and nontraumatic causes. AJR Am J Roentgenol. 2014 Jan 1;202(1):W67-75.
2. Ko K, Sung DH, Kang MJ, Ko MJ, Do JG, Sunwoo H, Kwon TG, Hwang JM, Park Y. Clinical, electrophysiological findings in adult patients with non-traumatic plexopathies. Ann Rehabil Med. 2011;35:807-15
2. Rubin DI. Brachial and lumbosacral plexopathies: A review. Clinical Neurophysiology Practice. 2020 Jan 1;5:173-93.
4. Vaidya JadavjiTrikamjiAcharya (editor), Susruta Samhita of Susruta, Nidanaasthana,chapter 1 ,verse no82 , Varanasi, ChaukhambaSurabharatiPrakashan, 2022
5. Vaidya JadavjiTrikamjiAcharya (editor), Susruta Samhita of Susruta, Sharirasthana,chapter 6 ,verse no26 , Varanasi, ChaukhambaSurabharatiPrakashan, 2022
6. Sharma Anantram, SushrutSamhita.Varanasi(India); Chaukambha Publications; NidanSthan 1/35. P 12
7. Vaidya YadavjiTrikamji Acharya (editor), Caraka Samhita of Caraka, Siddhisthana, chapter2,verse no 22, ChaukhambaSurbharatiPrakashan, Varanasi,2020.
8. Vaidya YadavjiTrikamji Acharya (editor), Caraka Samhita of Caraka, Sutrasthana, chapter4,verse no 16, ChaukhambaSurbharatiPrakashan, Varanasi,2020.
9. Pt Hari SadasivaSastriNavre (editor), AstangaHridaya of Vagbhata, Chikitsasthana, chapter 21, verse no 44, ChaukhambaSurbharatiPrakashan, Varanasi,2020.