MANAGEMENT OF GUILLAIN BARRE SYNDROME/ धातुक्षयज
पित्तक संसृष्ट सर्वगवात THROUGH AYURVEDA- A CASE STUDY

Dr. Ramesh Prasad Gupta¹* and Prof. (Dr.) B. B. Khutia²

¹Ph.D. Scholar, Dept. of Kayachikitsa, Gopabandhu Ayurveda Mahavidyalaya, Puri.
²Supervisor, Principal, Kaviraj Ananta Tripathy Sharma Ayurveda College & Hospital,
Ankushpur, Ganjam, Orissa- 761100, Berhampur -University.

ABSTRACT
Guillain-Barré syndrome (GBS) is an acute, rapidly evolving are flexic motor paralysis with or without sensory disturbance. It occurs year around at a rate of between 1 and 4 cases per 100,000 annually. Age is an important factor determining outcome, and prognosis. In children is said to be favourable as compared to adults. Direct correlation of GBS with Ayurvedic terminology is difficult. The presentation and Doshadooshyasamoorchana is considered first and then one should proceed with the treatment. Here a case of 50yrs old male presented with loss of strength in both the upper and lower limbs. Unable to get up, walk and stand brought to OPD of kayachikitsa department S.D.M. College of Ayurveda, Udupi- Karnataka. He was provisionally diagnosed as a case of acute inflammatory demyelinating polynueuropathy. As per Ayurvedic classics, this condition we have taken as Sarvangavata (Vata affecting the whole body). Hence, the line of treatment we have adopted Vatavyadhichikitsa which included Brihmanachikitsa along with Shamanoushadhis. The outcome was very remarkable with the patient able to walk on his own.

KEYWORDS: Guillain-Barré syndrome (GBS), Demyelinating polyneuropathy, धातुक्षयज पित्तक संसृष्ट सर्वगवात
INTRODUCTION

Guillain-Barre syndrome (GBS) is an acute; rapidly evolving is flexic motor paralysis with or without sensory disturbance.[1] During the acute phase, and disability can be severe and can result in respiratory in-sufficiency and death. The usual pattern is an ascending paralysis that may be first noticed as rubbery legs. Weakness typically evolves over hours to a few days and is frequently legs are affected than arms. Several subtypes of GBS are recognized, as determined primarily by electro diagnostic and pathologic distinctions. The most common variant is acute inflammatory demyelinating polyneuropathy, axonal variants, which are often clinically severe either acute motor axonal neuropathy (AMAN) or acute motor sensory axonal neuropathy (AMSAN).[2]

As per Ayurvedic classics this condition taken as धातुक्षयज पित्तकफ संसृष्टि सर्वोगवात which precedes Jwara. Hence the prime line of treatment was Jwaraharachikitsa-Amapachana for which we have selected Shamanoushadhis which contains Guduchi as a main ingredient, followed by Vatavyadhichikitsa it included Abhyanga (oleation therapy) and Shashti shalikapindsveda (sudation using hot Shashtika rice) along with Matrabasti (medicated oil enema) and other Vataharas hamanoushadhis.

CASE REPORT

A 50 years old male Patient (OPD No: 231938, IPD No.: 86252, Ward: MGW Ground Floor, Bed No.:20, Date of Admission: 07/09/2013) presented with reduced strength in both upper and lower limbs since last 1month. Not a k/c/o of DM, HTN was asymptomatic 1 month 11 Day back. There patient visited by one of his friend said to be driver faced the same problem and treated in SDMCA, Udupi. They brought the patient to our hospital, on 06/08/13 patient got admitted under Dr. G. S. Acharya sir for the same compliant took treatment and got discharged on 22/08/13. On 07/09/13 patient got admitted again for the follow up treatment.

Loss of strength

• Onset: Sudden
• Site: Both upper & lower limbs.
• Duration: 1 week.
• Character: Non progressive
• Severity : Moderate Severe
• Diurnal variation: Nothing specific
• **Aggravating factor:** Nothing specific
• **Relieving factor:** Medication

**Gained strength**
• Progression: Gradual
• Site: Both upper & lower limbs.
• **Duration:** 1 month.
• **Character:** progressive
• **Diurnal variation:** Nothing specific
• **Helping factor:** Medication

**PAST HISTORY**
Patient was healthy a month before presentation of symptom. One day on 01/08/2013 at evening time patient felt heaviness in the lower limbs and tingling sensation in the upper limbs but he neglected it and after having Dinner he slept. Next day morning on 02/08/13 when he got-up, he felt loss of strength in both the upper and lower limbs. He tried to stand but he fell down. For the same complaint he consulted a nearby physician Dr. Sridhar Vaidya, at Shreyas Hospital. After examination he advised him to go Shivamogga for further management in higher center.

After consulting in NANJAPPA SUPER SPECIALITY HOSPITAL, SHIVAMOGGA they Diagnosed the case as AIDP (Acute inflammatory Demyelinating Poly Neuropathy) WITH EARLY FRESH DM and given Conservative Treatment, Referred him to Dept. of Neurology, NIMHANS, and Bangalore.

**Treatment history**
• On NANJAPPA SUPER SPECIALITY HOSPITAL, SHIVAMOGGA. They given Conservative Treatment IV Fluids – NS, INJ. – Lvepred/Nervigen/omez and advised for IV Immunoglobulin/Plasmapharesis (But patient relative not willing for the same).
• On first admission in SDM hospital, Udupi 06/08/13 treated with, BVC with Gold 1-0-1, Lasuna Rasayana, Vestana with M.N. Taila, Tab. Herbolax 2hs. Discharge Medicine on 22/08/13 with following medications Cap. Nuro 1-1-1, Ksheera bala 101 10 ml./day at 6am, Tab. Dashmoolkatutradya 1-1-1, M.N.Taila for E/A, Trivritha Leha 8gm on 23/08/13 after end on Lasuna dose.
PERSONAL HISTORY

- Diet - mixed, more intake of non-veg. More food of spicy and fried items.
- Appetite – Good
- Bowel - 2time /day of normal colour and no constipation
- Urine - 5-6 times/at day time & 1-2 times at night time normal colour
- Sleep - Sound.
- Habits- alcohol consumption 1 peg approx 60 ml per day

EXAMINATION ON ADMISSION

_Vital signs_

- Temperature - 98.4°F (oral)
- Pulse - 76/min Regular
- Respiratory rate -18/min
- BP - 110/70 mm of Hg. (on rt. Hand, Supine Position)

CENTRAL NERVES SYSTEM EXAMINATION

_HIGHER MENTAL FUNCTIONS_

- Conscious level– fully conscious
- Orientation – Time, Place and person present
- Intelligence – Good
- Memory – Immediate, Recent and Remote are normal
- Hallucination, Delusion and Illusion – Absent
- Speech- Normal speech

CRANIAL NERVES

- 1<sup>st</sup> c.n: Sense of smell normal.
- 2<sup>nd</sup> c.n: Acuity of vision- Normal, visual field- normal, color vision-normal.
- 3<sup>rd</sup>, 4<sup>th</sup>, 6<sup>th</sup>: External occular movement: normal, pupil normal.
- 5<sup>th</sup>: sensation over face- normal
- 7<sup>th</sup> c.n: On eye closure-Blinking of eyes, Frowning – possible, Raising eyebrows- possible, Showing teeth- Possible
- 8<sup>th</sup> c.n – Hearing peak of Watch- normal, Rinnes Test, Webers Test-normal
• 9th, 10th, 11th – Sensory Part of tongue superficial- normal, Palatine movement – normal, Shrugging of Shoulder – normal
• 12th c.n: Tongue movement – Can perform

Sensory system examination
Superficial: Touch - Normal sensation, Temp – normal, Pain – Normal
Deep: Crude touch, Vibration, Joint sensation, Position Sense, Pressure sense -Intact.

Motor system examination
2. Nutrition: The girth of UL- Arm and forearm -No wasting present and LL- Thigh and calf- Normal nutrition
3. Tone: Both UL & LL – Hypotonic and Spasticity & rigidity – absent on both sides
4. Muscle power: Bulk of the muscle – Equal on both sides

UPPER LIMB

<table>
<thead>
<tr>
<th>A. Shoulder</th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adduction</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Abduction</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Flexion</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Extension</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Rotation external &amp; internal</td>
<td>70*</td>
<td>70*</td>
</tr>
<tr>
<td>B. Elbow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexion</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Extension</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>C. Wrist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dorsi flexion</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Palmar flexion</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Ulnar &amp; radial Deviation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Supination &amp; Pronation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>D. Grip-weak</td>
<td>3/5</td>
<td>2/5</td>
</tr>
</tbody>
</table>
LOWER LIMB

<table>
<thead>
<tr>
<th></th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adduction</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Abduction</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Flexion</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Extension</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexion</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Extension</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Right</th>
<th>Left</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dorsi flexion</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Palmar flexion</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Muscle wasting: No abnormality detected.


6. Involuntary movements: Fasciculation, Tremor, Chorea, Athetosis, Hemibalismus- Intact

7. Gait: walking with Support


ASTHASTHANA PARIKSHA

- NADI: 76 times/min vataja kaphaja nadi (paravata gati)
- MALA: 2time/day, normal consistency
- MUTRA: Prakruta varna
- JIHWA: Nirliptata
- SHABDA: Prakruta
- SPARSH: Prakruta (anushna sheeta)
- DRIK: Prakruta
- AAKRUTI: Madyama

DASHAVIDHA PARIKSHA

- Prakruthi - Vata-pitta
- Vikruthi - Dosha- vata-kapha, Dushya – rasa, meda
- Desha - Jata : Anupa, Samruddha : Anupa, Vyadhita : Anupa
- Bala- madhyama
- Sara – madhyama
• Samhanana- madhyama
• Satmya- pravara
• Satva- madhyama
• Pramana – ht: 5’2” wt : 55 kg
• Ahara shakti – Purva kalina- pravara, Adhyatana kala- avara
• Jarana shakti- purva kalina- pravara, adhyatana- avara
• Vyayama shakti- purva kalina- pravara, adhyatana kalina- avara
• Vayah- Madhyama
• Koshta- Madhyama
• Lakshana : Urdhwa adha shaka karma, chesta hani, saada, aruchi

निदान

आहारज निदान (Aharaja Nidana)
1. Mixed, more intake of nonveg.
2. More food of spicy and fried items.
4. Per Day Alcohol consumption

विहारज निदान (Viharaja Nidana)
1. More physical activities.
2. Standing for long time.
3. वेगधारण

मानसिक निदान (Manshika Nidana)
1. क्रोध
2. भय
3. सतत चिन्ता

पूर्वसूचना - Patient felt heaviness in the lower limbs and tingling sensation in the upper limbs.

*Aruchi* and *Agnimandya.*
रूप – गतिसंरक्षण (That is hasta-pada karma hani), हस्त-पाद दाह, अति निद्रा, हस्त-पाद गुस्ता and रुजा

उपशाय – औषध

अनुपशाय – सर्व निदान

SAMPRAPTI

अपत्तपण जन्य निदान सेवन
↓
पित्तक्र सांसर्गी
↓
वातवह स्त्रोतस (शिरा, स्नायु, कण्डरा) दुष्टि
↓
स्थान संस्र्व in (शिरा, स्नायु, कण्डरा)
↓
गुस्ता सर्व गामाण्यां, सर्व संधि अस्तिय रुजा, गति संगोत्स्वात्शाखा
↓
चेष्टानाश
↓
धातुक्षयज पित्तक्र संस्र्वृष्ट सद्वैववा

सम्प्राप्ति घटक
• दोष–Pitta-Kapha Samsarga Vyana Vata
• दृष्टि–Dhatu: Rasa, Rakta, Mamsha, Medhash, Upadhatu: Sira, Snayu, Khandara
• स्रोतस्–Vatavaha Srotas, Chestavaha, Rasavaha, Mamshavaha, Medovaha
• स्रोतस् दुष्टि–Sanga
• अति – Jhataragni, Dhatwagni
• आम–Jhataragni mandhya janita
• उद्धव स्थान–पक्वाश्वाय(2)
• सन्धार स्थान–सर्व शरीर
• अधियान–सर्व शरीर
• व्यक्त स्थान–Urdhwa adhaha shakha
• रोगमार्ग–मध्यम
INVESTIGATION
Routine Blood Investigation: at NANJAPPA HOSPITAL, SHIVAMOGGA on 03/08/2013
Hb% -14.3gms%, Total WBC -12200 cells/cumm, Differential WBC, N- 93.3%, L-5.2%, M-1.5%, B- 00%, GRBS- 105mg/dl, Blood urea: 30.3mg/dl, Total RBC - 4.61 million/cu.mm.
Platelet Count -375000 cells/cu.mm, PCV - 42.5%, MCV-92.2%, MCH - 31.0 picogram MCHC - 33.6%, Electrolytes (03/08/13): Sodium(Na+) 133 mg/dl, Potassium(K+) 4.30mg/dl, Chloride (Cl-) 111.0mg/dl. Urine examination: Albumin – Nil, Sugar - Nil, Microscopic Examination, Epithelial cells: 2-3/hpf, Pus cells:2-3/hpf, R.B.Cs.: 0-1/hpf. X Ray LS Spine AP & Lat.

Findings on 03/08/13
• There is normal lumbar lordosis without listhesis.
• Vertebral body height are normal, without compression fracture.
• Intervertebral disc spaces are relatively maintained.
• Anterior osteophytes are noted.
• Prevertebral soft tissues are unremarkable.
Impression: Mild Degenerative Changes.
ROUTINE BLOOD INVESTIGATION: (at sdmca, udupi on 07/08/2013)
Hb% -14.25gms%, Total WBC -8700 cells/cumm, ESR-28mm/hr, Differential WBC, N-78%, L-17%, E-04%, M-1%, B- 00%, GRBS- 80mg/dl, Blood urea :56mg/dl, Serum creatinine 1.2mg/dl, serum uric acid : 2.4mg/dl Total RBC - 4.3 million/cu.mm.
Platelet Count -3lakhs cells/cu.mm, PCV – 41.7%, MCV-96% fl, MCH – 32.9 picogram MCHC – 34.2%, RDW-13.8%. Urine examination: Albumin – Nil, Sugar – Nil.
Urine Microscopic Examination: Epithelial cells – 2-3/hpf, Pus cell - 2-3/hpf R.B.Cs. - 0-1/hpf, Lipid profile (on 07/08/2013) Total cholesterol : 188.0 mg/dl, Serum Triglycerides: 89.0 mg/dl, HDL Cholesterol : 53mg/dl, LDL Cholesterol :117 mg/dl. VLDL: 18mg/dl, TC/ HDL Ratio : 3.9 mg/dl, LDL/ HDL Ratio : 2.5 mg/dl.

DIFFERENTIAL DIAGNOSIS
• Gullian Barre Syndrome
• Transverse Myelitis
• Multiple Sclerosis
• Myasthenia Gravis

DIAGNOSIS

CLINICAL DIAGNOSIS
• Gullian Barre Syndrome.
(Acute Inflammatory Demyelinating Polineuropathy).

ANATOMICAL DIAGNOSIS
• Demyelination Polyneuropathy.

PATHOLOGICAL DIAGNOSIS
• Peripheral Nerve Demyelination.

व्याधि व्यवस्थापन
• SARVANGAVATA
• KAPHAVRTA VYANA VATA
• PANGU
• PAKSHAGHATA
MANAGEMENT

चिकित्सा सूत्र

- सर्वाङ्गकुपऩतेऽभ्यङ्गो बस्तयः सानुवासना:||[4]
- सर्पिसेलवसामजसंकेतमवनवश्चयः || स्निग्धाः स्वेदा निवां च स्थानं प्रावरणानि च रसा: पथापि भोज्यानि स्वादुमन्दलवणानि च|| बृंहणं यथच तत् सर्व प्रसन्नं वातरोगिणाम्[5]

PROGNOSIS

Krichrasadya

SADHARANA CHIKITSA

- Especially in Pittavruta and Kaphavruta Vata.

"अननिष्ठन्दिमि: स्निग्धेऽस्त्रोतसं शुद्धिकारके: भक्षणानुसारं यथच बातानुगचनम्|
सर्वस्थानानुज्यायाशु तनावं मास्ते हितम् यापनवस्तः प्रायो मद्युः सानुवासना:|
प्रस्थानेन विलासयोऽवस्तः ज्ञानं न क्रियान वातोऽपिनाम् प्रायो व क्रियान वातोऽपिनाम् |
शैलस्य ज्ञानोज्याशु वस्त्रा गुरुलोमात्शा लेघ्व व भार्गव प्रकृमणेन स्मृत्त क्रियामुक्तः |
अभयायमलकीयोक्ते एकाश्चित्तस्थितनम्[6]

Anabhishyandi, Snigdha, Srotoshuddhikaraka-Ahara and Oushadhis. Yapana Basti, Madhura pradhana Basti, Anuvasana Basti. Acc to Rogibala and Rogabala Mruduvirechana. Rasayana prayoga, Shilajatu Prayoga. In the condition of kaphavruta Vata, the treatment of Kapha, which is Anulomana to Vata, Should be prescribed.

"उद्दाना योज्येद्वृत्तं अपानं श अनुलोमयेत् |
समानं शमयेद्वृत्तं तिथा व्यां तु योजयेत् |
प्राणो रक्ष्यक्ष्युर्भः दीपं स्थाने धिर्मितिध्युवा |
स्वं स्थानं गमयेदवं बुतानेतान् विमार्गिणाध्[9]

Udana-should be regulated upwards. Apana- should be regulated downwards. Samana-should be pacified (shamayet). Vyana- by all the three above measures. Thus the various types of Vata that are occluded or misdirected should be established in their normal habitat.
Chikitsa
1. Dhanadanayanadi Kashaya
2. Maharasnadi kwatha
3. Balarishta
4. Balashwagandha
5. Yogaraja guggulu
6. Brahat vata chintamani rasa
7. Vatagajankusha rasa
8. Bharagava prokta rasayana

Treatment Given
In hospital on 07/09/13
• Cap. Nuro 1-1-1
• Vestana with M.N. Taila to both upper and lower limbs.
• Yastimadhu Rasayana on 08/09/13 – 10gm with milk at 6am OD, 09/09/13 – 20gm with milk at 6am OD, 10/09/13 – 30gm with milk at 6am OD, 11/09/13 - 40gm with milk at 6am for 1 Month same dose.

Pathya
• मधुर-अम्ल-लवण रस, स्निग्ध, सन्तर्पक, पाचक and अनुलोमन food are wholesome.
• रक्तशालि, गेहू, ज्वार, कुलत्थ, ग्राम्य and अनूप मांस, अजा मांस

Apathya
• आहार:- चणक, सुपारी, कटु-तिकत-कषाय रस प्रधान भोजन
• विहार:- मैथुन, चिन्ता, रात्रिजागरण, श्रम, वेग-धारण

CASE SUMMARY
A 50 yrs old male, moderately nourished, normosthenic built, not a K/c/o HTN & DM, was apparently normal 1month11 days back. On 1st Aug. 2013 at evening time sudden he felt heaviness in the lower limbs and tingling sensation in the upper limbs. Next day morning on 02/08/13 he felt loss of strength in both the upper and lower limbs. He tried to stand but he fell down. He consulted a nearby physician Dr.Sridhar Vaidya, at Shreyas Hospital. After examination he referred the case to Shivamogga for further management in higher center.
Patient got admitted there in NANJAPPA SUPER SPECIALITY HOSPITAL, SHIVAMOGGA they Diagnosed the case as AIDP WITH EARLY FRESH DM and given Conservative Treatment, even after 1 day Referred him to Dept. of Neurology, NIMHANS, Bangalore But patient not visited NIMHANS they come in our hospital and got admitted, under Dr. G. Shrinivasa Acharya sir for the same compliant hear base on proper history taking and Hematological Investigation patient Diagnosed धातुक्षय फिलक संसूःस्त/ GULLIAN BARRE SYNDROME and took treatment and got discharged on 22/08/13. On 07/09/13 patient got admitted again for the follow up treatment.

**Now patient treated with this medication**

- Cap. Nuro 1-1-1
- Vestana with M.N. Taila to both upper and lower limbs.
- Yastimadhu Rasayana on 08/09/13 – 10gm with milk at 6am OD, 09/09/13 – 20gm with milk at 6am OD, 10/09/13 – 30gm with milk at 6am OD, 11/09/13 - 40gm with milk at 6am for 1 Month same dose.

Internally patient was administered
DISCUSSION

Conceptual analysis of GBS in Ayurveda
Pathology- In the demyelinating forms of GBS, the basis for flaccid paralysis and sensory disturbance is conduction block. First attack on schwann cell surface, widespread myelin damage, macrophage activation, and lymphocytic infiltration. If the axonal connections remain intact the recovery will be faster as rapidly as remyelination occurs. Circumstantial evidences suggests that all GBS results from immune responses to nonself antigens (infectious agents /vaccines).\(^8\) By analysing the Vyadhivruthanta (history of illness), Nidana (etiology), Lakshanas (symptoms) presented here we have taken in consideration of पिल्लकफ संसृष्ट (pathology) and धातुक्षय ज समप्रप्ति and finally arrived a final diagnosis as धातुक्षय पिल्लकफ संसृष्ट सर्वांगवात and started treating this particular condition.

GB syndrome done at Govt. Ayurvedic Hospital, Nagpur\(^9\) where managed with Vatahara as well as Jvaraharachikitsa for which medicines selected was Candanbalalakshditaila for Abhyanga, nadisweda with Nirgundi and Dashamoola siddha kwatha along with Shashtikashalipindasweda with Balamula, Aswagandha churna and Shathavarichurna. Shirodhara with Tilataila. Kshira processed with Pittaharadravya in the form of Basti was used and Tilatalabasti (sesame oil enema) was given on alternate days. Brhatvatachitamani kalpa which was composed of Brhatvatachitamani guduci (Tinospora cordifolia) Sattva, 30 g; Rajatabhasma 5 g and Sutasekhara rasa 30 tab each of 250 mg powdered together and divided into 60 divided doses BD was given as internal medicine. Patient was treated for a total of 36 days after which patient showed marked improvement in muscle power, gait, and reflexes.

One more case study done at SKAMCH & RC treated by selecting internal medication as Gardabhapaya in empty stomach along with Shashtikashali Pindasweda followed by Nasya with Ksheerabalathamaila 101, Rajayapan basthi with Brihath-chagalyatghrta in Kalabasti schedule, where patient showed marked improvement in gait, muscle power, muscle tone, reflexes and symptoms like tingling sensation.\(^10\)
CONCLUSION
The analysis of GBS in terms of Ayurveda concludes that the GBS is a symptom complex where we can’t correlate particular Ayurvedic term, but based on the symptoms here we have taken as धातुक्षययज पित्तकक्ष संसृष्टि सर्वावलि।

According to biomedicine, approximately 85% of patients with GBS achieve full functional recovery within several months to year.\[^{11}\] In this patient recovery was seen in one and half months, which is suggestive of quicker beneficial effects of Ayurvedic treatment. Along with the Ayurvedic Vestana Chikitsa as well as Shamenoushadhis. This case study not only gives us confidence and better understanding for treating such cases in Ayurvedic hospital but also leads in the direction of further clinical trials to establish cost effective Ayurvedic therapy. As immunoglobin treatment is a costly alternative, cost effectiveness of the Ayurvedic treatment seems promising.

BIBLIOGRAPHY
2. Ibid.

