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Case Report

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# MANAGEMENT OF ATONIC BLADDER WITH VARMAM INTERVENTION – A CASE REPORT

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## ABSTRACT

Varmam therapy is a unique branch of Siddha medical system which renders treatment to many kinds of diseases and plays an important role in certain diseases where in regular internal medicines of both Indian Medicine and allopathy medicine fails. This paper brings the role of Varmam therapy in the management of atonic bladder resulted with various aetiologies like operated congenital conditions lumbosacral meningomyelocele, operated tethered cord. In these conditions varmam therapy was given to patients after many months and years of surgery. But significant natural output of urine was observed in all patients who have been using self catheter to void urine since many years. The varmam points stimulated *were Kondaikolli, Pinkannady kalam, Porchai kalam, Adappa kalam, Idampuri kalam, Valampuri kalam, Kallidai kalam, Mannai adangal and Patchini varmam* in regular intervals i.e., twice a week. The volume of urine discharged naturally increased within ten days, although significant improvement was noted in menigomyelocele who was presented with paraplegia. This may be because of the stimulation of pontine micturition centre which in turn regulate the micturition cycle through Varmam therapy. Further scientific studies are needed to prove its mechanism of action to reach the global community.

**KEYWORDS:** Varmam therapy, lumbosacral meningomyelocele, tethered cord.

## INTRODUCTION

Neurogenic bladder is a malfunctioning bladder due to any type of neurological disorder. There are two types namely, sensory neurogenic bladder and motor neurogenic bladder. In the former type, the individual may not able to sense the bladder is full and in the latter detrusor areflexia, the bladder dilates as usual but fails to empty, due to incorrect transmission of brain signals to bladder, usually arising from spinal cord lesions, which may be congenital, traumatic or as surgical complication.[1] In this kind, patient may experience difficulty in voiding urine or overflow incontinence. This neurological condition has no effective solution except clean intermittent catheterization which is considered as the best treatment of choice because of easy handling and good results in preserving renal function, prevention of urinary tract infection, continence can be achieved.[2]

Varmam therapy is a unique branch of Siddha medical system which renders treatment to many kinds of diseases and plays an important role in certain diseases where in regular internal medicines of both Indian Medicine and allopathy medicine fails. Stimulation of Varmam points accentuate the nervous mechanism, helping in clinical improvement. It is very awful to look at the patients suffering from neurogenic bladder as only self catheterization seems to be good available treatment. Hence an attempt had been made to bring out the effect of Varmam therapy in neurogenic bladder.

This paper presents the case report of two cases namely operated congenital conditions meningomyelocele and operated tethered cord presented with atonic bladder and discusses about the clinical improvement with Varmam therapy. In these conditions varmam therapy was given to patients after many months and years of surgery respectively. Significant natural output of urine was observed in both the patients who have been using self catheter to void urine since many years.

## MATERIALS AND METHODS

### CASE 1

#### Patient information

A 15 year old female patient is a known case of operated Lumbosacral meningomyelocele presented with paraplegia, neurogenic bladder on 6th August 2016 at Appasamy Hospitals, Arumbakkam, Chennai.

#### History of illness

She was born with Lumbosacral meningomyelocele of size 7.5* 7.5 cm, anovestibular fistula presented with paraparesis, dribbling of urine and continuous passing of

stools on handling the baby. Hence was operated on 3rd day of life at Kanchi Kamakoti Cahilds Trust Hospital, Chennai. VP shunt was done at 9 months of age.

**Clinical findings**

Her both lower limbs had power 0 and diminished reflexes. She had moderate sensation to pain and touch in right lower limb except at toe region. She could not recognize any sensation in her left lower limb. Her upper limb, memory and academics were normal. Her bowel habits were regular and she can restrain when needed. Menstrual cycle is regular. She suffered neurogenic bladder and was using self catheter on regular intervals to void urine since three years of age.

**Therapeutic intervention**

She was started with Varmam treatment on 6th August 2016. She was planned for weekly two days tuning of Varmam points.

The Varmam points given were *Kondaikolli, Pinkannady kalam, Porchai kalam, Adappa kalam, Idampuri kalam, Valampuri kalam, Kallidai kalam, Mannai adangal and Patchini varmam.*

**Location of varmam points**

1. Kondaikolli - Mid of the vertex of head (Fig.1)
2. Pinkannady kalam - on the sub occipital protuberance (Fig.2)
3. Porchai kalam - on either side of occipital protuberance (Fig.2)
4. Adappa kalam - along mid axillary line on the rib cage (Fig.1)
5. Idampuri kalam - Three finger breadth below the sacral dimple. (Fig.2)
6. Valampuri kalam -Three finger breadth below the sacral dimple. (Fig.2)
7. Kallidai kalam - Six finger breadth below the navel. (Fig.1)
8. Mannai adangal - Mid of the calf muscle region. (Fig.2)
9. Patchini varmam – Fourth web space of the foot. (Fig.1)

Additionally, *Vilangu Varmam* (Fig.1), *Anna kalam* (Fig.1), *Nanganapootu* (Fig.2), *Komberi kalam* (Fig.1), *Viruthi kalam* (Fig.1) and *Ullangal vellai Varmam* (Fig.3) were also stimulated in view of improving the sensation of lower limbs. No internal medicine was given. Patient was advised to take food in time to prevent hyperacidity.

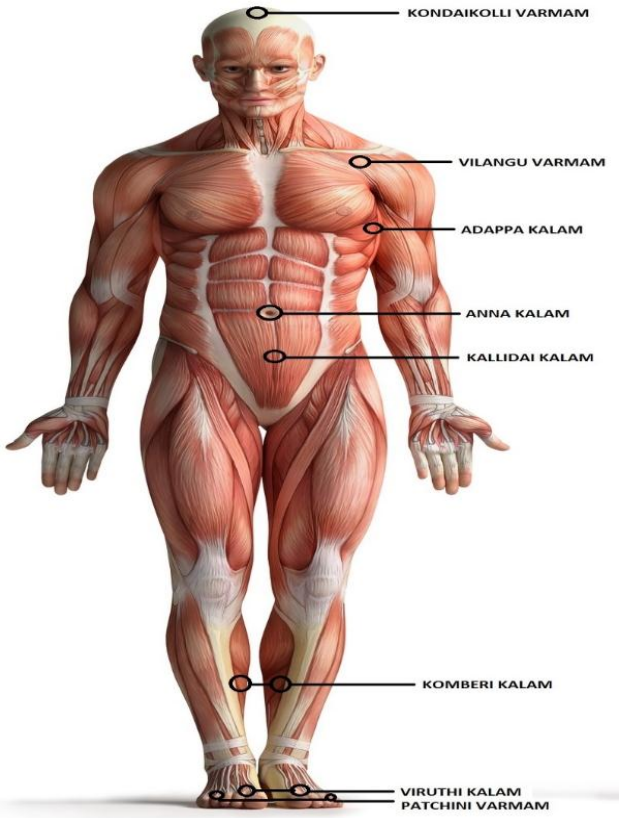


**Fig. 1: Varmam points stimulated for atonic bladder – Anterior view.**

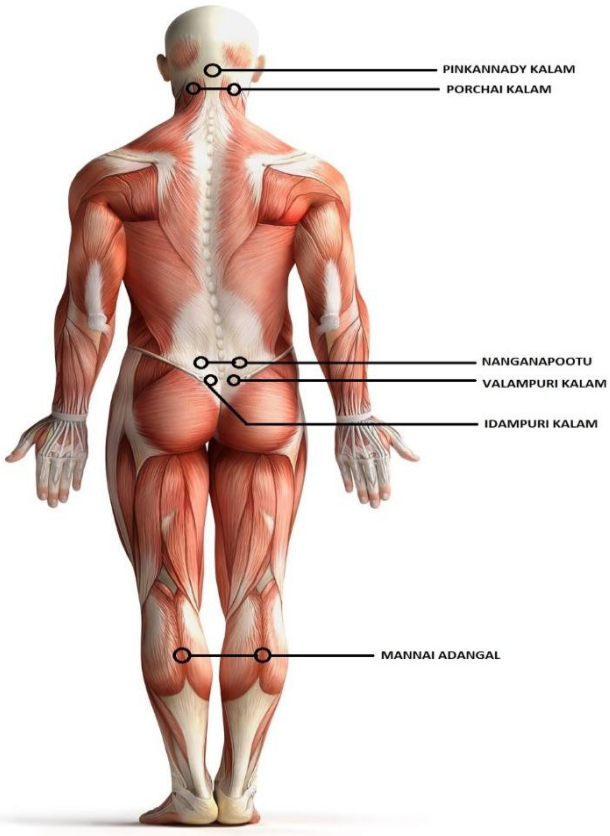


**Fig. 2: Varmam points stimulated for atonic bladder – Posterior view.**

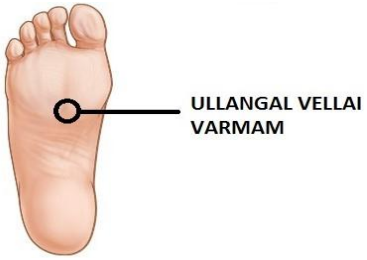


**Fig. 3: Associated varmam point stimulated for atonic bladder – Posterior aspect of foot.**

**CASE 2**

**Patient information**

A 30 year old male patient presented with loss of voluntary emptying of urinary bladder followed by surgical procedure L4-L5 laminectomy, detethering of cord on 17th September 2015.

**History of illness**

This patient suffered pain in both foot and right calf muscle region for 3 months June-September 2015. His MRI revealed split cord malformation extending L2-L3 upto L4 level. Syrinx extension to D8-L2 level. Neurologists opined to post for surgery. Until surgical intervention his micturition, defaecation were normal. He underwent surgery on 17th September 2015.

**Clinical findings**

Patient was presented to Arivan Siddha & Varmam Clinic on 4th February 2016 with difficulty to void urine naturally after surgery. He was on self catheterization every four hours, usually 5-6 times per day to void urine at regular intervals to prevent infection and renal complications. Although, his natural output was few drops to approximately 30 ml urine only in morning hours.

**Therapeutic intervention**

Varmam treatment was given intensively on alternate days for first two weeks. The Varmam points given were *Kondaikolli, Pinkannady kalam, Porchai kalam, Adappa kalam, Idampuri kalam, Valampuri kalam, Kallidai kalam, Mannai adangal and Patchini varmam.*

**RESULT**

**CASE 1**

From the beginning of treatment she had improvement in sensation of lower limbs. From 5th sitting of treatment, patient showed remarkable improvement in emptying the bladder. She could expel the urine naturally, she could feel the fullness of bladder, can control the urge to micturate.

Varmam treatment helped her to restore the nervous function of the bladder within two weeks of treatment without any medicines, putting an end to the catheter which she had been using since 3 years of age. Till date, the improvement in neurogenic bladder persists and she is under regular follow-up.

**CASE 2**

From third sitting patient could pass few drops of urine

in afternoon for two times. After 20 days, the volume of natural output of urine increased from 30 ml to 200 ml, especially in morning and the remaining urine was discharged with catheter.

Even though, urine flow and volume improved at afternoon and night complete evacuation of bladder could not be achieved. After two months, total urine discharged in early morning was 300 ml, afternoon 150 ml and at night 150-200 ml.

## DISCUSSION

The normal function of the urinary bladder is to store and expel urine in a coordinated, controlled fashion. Neurogenic bladder is a malfunctioning bladder due to any type of neurological disorder. The act of micturition is coordinated and regulated by the central and peripheral nervous systems. The centres of micturition are situated in the spinal cord, brain stem, hypothalamus and cerebral cortex. The voluntary control is exerted by cerebral cortex. There are both facilitatory and inhibitory effects by the higher centres on the primary spinal cord reflex centre. Posterior hypothalamus and pons are facilitatory, mid brain is inhibitory.[3] The common causes are sacral cord tumour, herniated discs, injuries, lumbar laminectomy, radical hysterectomy, abdomino perineal resection.[1]

Symptoms of neurogenic bladder range from detrusor underactivity to overactivity, depending on the site of neurologic insult. The urinary sphincter also may be affected, resulting in sphincter underactivity or overactivity and loss of coordination with bladder function. The available treatments are clean intermittent catheterization, bladder augmentation, cutaneous vesicostomy, artificial sphincter devices[4] and other manual exercise like pressing on bladder to squeeze urine out, straining abdominal muscles as if to have bowel movements. A drug called bethanechol 25- 50 mg is indicated for retention of urine without obstruction as in neurogenic bladder or post operative, which facilitates emptying by the stimulation of para sympathetic nervous system to achieve detrusor contraction.[5]

The appropriate therapy and a successful outcome are predicted upon accurate diagnosis through a careful medical and voiding history together with a variety of clinical examinations, including urodynamics and selective radiographic imaging studies.

The two cases presented here were lower motor lesions due to congenital anomalies. Even though surgery was done, they suffered from neurological ailments. In both the cases, neurogenic bladder responded well to Varmam treatment without any medicines. It is evident from the result that Varmam treatment helps to establish micturition even after many years of surgery.

The clinical improvement may be because of correction of nervous transmission with stimulation of Varmam points. Varmam points tuned were basically aimed to regulate the connection between higher centres of brain and sacral flow. The Varmam points namely *Kondaikolli, Pinkannady kalam, Porchai kalam stimulate* the higher centres in brain and regulates Vaasi throughout the body, *Adappa kalam* regulate the energy flow in idakalai and pingkalai naadi, *Idampuri kalam, Valampuri kalam, Kallidai kalam, Mannai adangal and Patchini varmam* are directly connected with bladder and brain.

This study is very preliminary presenting only the clinical improvement. Further studies should be done to elicit the post void residual urine through Ultrasonogram and voiding cystometrogram to accomplish the evidence based outcome. Many clinical trials with big sample size should also be conducted. Neuro imaging and brain mapping studies should be conducted to accomplish the mechanism of action of Varmam points.

## CONCLUSION

This case report on neurogenic bladder with Varmam therapy is a pioneering work which throws light upon the strength of Siddha Medical system. Establishment of nervous mechanism with few sittings of Varmam treatment must be studied in detail clinically and as well as to find out the mechanism of action.

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