

# Marma Chikitsa in Pain Management of Vataj Gridhrasi– Clinical Case Series

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## **Abstract: -**

**Background:** Gridhrasi is one such disorder which impairs the movement of lower back and legs due to aggravation of vata characterised by radiating pain from kati pradesh to pada sthana which clearly resembles with sciatica. The disease is one of the major problems throughout the world leading to loss of national production resulting into economic loss even in developed countries.

**Methods:** Five patients were treated for Vataj Gridhrasi using the described technique.

We describe a novel massage approach and technique for relief of the pain in the treatment of Vataj Gridhrasi. Described are planning, techniques and approach for managing pain in Vataj Gridhrasi.

**Results:** Every patient displayed successful relief of their symptoms immediately following the new marma massage. Symptomatic clinical assessment was carried out on patient and satisfactory outcomes found.

**Conclusion:** The aforementioned therapy gives symptomatic relief for the management of Vataj Gridhrasi.

**Keywords:** Marma, massage, gridhrasi, vata vyadhi, sciatica

## **Introduction**

The modern lifestyle of the world has changed the nature of work which makes added tension on the lower back region of the body. *Gridhrasi*<sup>1</sup> is one such condition where dysfunction of *vata* affects *gridhrasinadi* resulting in stiffness (*Stabdhata*), pain (*Ruk*), pinning sensation (*Toda*) radiating down the posterior border of the thigh, calf, outer border of ankle, foot and fingers.

Sciatica is a relatively common condition with a lifetime incidence varying from 1.1% to 6%, the prevalence of sciatica symptoms reported in literature varies considerably ranging from 1.6% to 43% in selected working population<sup>2</sup>. It is most prevalent in people during their 40s and 50s and men are more commonly affected than women. Low back pain has been enumerated as fifth most common cause for hospitalization and the third most frequent reason for a surgical procedure. Sciatic pain affects work profile and generates bad temper. It has been observed world wide that about 25% of loss of work is due to backache problems. In modern medicine, the treatment for sciatica comprises of analgesic drugs and rest in bed. Unfortunately, all the analgesics are liable to be risky. Repeated and prolonged use may give rise to many side effects. According to Acharya *Chakrapani*, the pain associated with *gridhrasinadi* begins at the hip and then radiates sequentially to the lumbar region, back, thigh, knee, calf, and feet. In *Vataj Gridhrasi*, Acharya *Charaka*<sup>3</sup> described symptoms such as *Ruka* (Pain), *Toda* (Pricking sensation), *Stambha* (Stiffness), and *Muhuspandana* (Twitching) in *Sphik*, radiating towards the *Kati*, *Prushtha*, *Uru*, *Janu*, *Jangha*, and *Pada*, respectively. Acharya *Sushruta* and Acharya *Vagbhata* identified the restriction in lifting the leg, known as '*Sakthyutkshepa Nigrahayati*,' as the cardinal sign of *Gridhrasi*.

Acharya *Madhava* noted deviations in the body (*Dehasyapravakrata*), quivering sensation (*Sphuranam*), and stiffness (*Stabdhata*) in *Janu* and *Kati*. *Kati pradesh* is considered the seat of *Vata Dosha*<sup>4</sup>.

Ayurveda emphasizes the significance of anatomical and physiological points called '*Marma*' in our body. These *Marma* points act as junctions where *Prana* (life force) is particularly seated. Any injury to these *Marma* points disrupts the flow of *Prana*, leading to the manifestation of diseases.

The Kalari school of Kerala and south Karnataka practices various types of massage known as *MarmaChikitsa*. *MarmaChikitsa* is a valuable contribution from ancient India and holds a unique place in healing due to its universal applicability, quick results, non-pharmacological nature, and safety. The terms '*Marma*' and '*varmam*' are used synonymously to represent vital points in the body, with '*marma*' used in Malayalam (as *Marmam*), Tamil (as *Marmam*), and Sanskrit (as *Marma*) languages.

*Nadi marmaabhyangam* is one of the massage techniques used in Kerala, which significantly considers the *Nadi* (energy channels) and *Marma* points during the process. These terms correspond to various classical terminologies given in Ayurvedic literature, such as *abhyangam*, *samvahan*, *udavartan*, *udgharsan*, *utsadana*, *avapidana*, *Mardan*, *paripadana*, and more.

Injury to *Marmasthana* can be classified as *Bahya* (external) or *Abhyantara* (internal). *Bahya* injury occurs due to direct trauma to these points, while *Abhyantara* injury is caused by vitiated *Doshas*. Injury to these *Marma* points is referred to as *Marmabhogata*, and it is one of the causes of *Vatavyadhi*. Injury to these *Marma* points can result in *VataPrakopa*, leading to pain, swelling, numbness, loss of functions, and sometimes even death.

The primary management approach for *Marmabhogata* is to protect or correct the *Marma* and restore the normal flow of *Prana*, known as *MarmaChikitsa*<sup>5</sup>. This can be achieved by externally manipulating or stimulating the *Marma* points. *Mardana* and *Bandhana* techniques are advised in the management of *Snayu* and *Sandhigatavata*.

A clinical trial was conducted to evaluate the efficacy of *Marma* massage and simple *matrabasti* (oil enema) in *VatajGridhrasi* cases. In *KevalaVataja* and *DhatuKshayaja* conditions, *Shamana* or *BrumhanaBasti* containing a higher number of *SnehaBastis* can be adopted<sup>6</sup>. *MurchMurchit til tail* is one of the best *sneha* mentioned in ayurvedic literature. It improves strength of the muscles, bones and joints.

And, the results are reported to be very encouraging which can create positive belief in the minds of people about special techniques of ayurved. Below here we are presenting five cases of *VatajGridhrasi* enrolled for seven days of intervention.

## Materials & Methods

A series of 5 patients were taken to undergo this massage technique for treatment of *VatajGridhrasi*. They were treated during pilot study of *marmaabhyanga* in *VatajGridhrasi* at Parul Institute of Ayurved. The patients gone through complete screening and examination for *VatajGridhrasi*. They all underwent *marma* massage with *murchit til tail* along with *matrabasti* of *murchit til tail*<sup>7</sup>.

An informed consent from each patient was obtained before starting the course of treatment.

## Diagnostic criteria

### Subjective Parametre –

*Ruk* – Grade 0-4

*Stambha* – Grade 0-4

*Toda* – Grade 0-4

*Spandan* – Grade 0-4

### Objective Parametre–

VAS Scale

Straight leg raise test

Flip test

Slump test

Range of Movements with goniometre

### Inclusion criteria

Aged between 20 to 60 years .

Patients having the classical signs and symptoms of VatajGridhrasi

stabdhata ( stiffness) ,

*ruk* ( pain ) ,

*toda* ( pinning sensation ) &

*stambhana* with emphasis to symptoms of Sciatica.

Patients of both gender .

### Exclusion criteria

1. Patients suffering from malignancy , major disorders of spine and major generalized diseases like C.C.F , IHD , Diabetes , renal disorders and immune compromised patients were excluded.

2. Pregnant , menstruating females and breast feeding mothers were excluded.

3. Subjects with evidence of congenital anomalies of the spine , Traumatic fractures , epidural abscess , Pott's spine ,CA etc.

### Treatment protocol

Five patients were treated with *marmamassage* ( *abhyanga*) for the time period of one week. Along with *marmamassage*, they were subjected to *matrabasti* ( oil enema ) of *murchit til tail* ( 72ml ) .

In *marma* massage, *marmachikitsa* is followed by *abhyanga* over marma points. The method of stimulating the marma points (varmamam points) is called as ' *kaibagam&saibagam*.' *kaibagam*' is The technique of choosing particular fingers to stimulate and ' *Saibagam*' is the application or stimulation. There are 12 methods of application according to Varma logical science . Here on *vatajGridhrasipatients* , *tadaval* and *undral* method was used. Gentle stroking with The fingers is known as *tadaval* and pressing The *marma* point with a single finger is known as *undral*.

The amount of pressure to be applied is every essential to consider during *marmachikitsa*. There are four different *matrai* ( amount) for application of *marmachikitsa* viz :

Type of stimulation	Amount of pressure	Mechanical aspect
Unnal	1/4 <sup>th</sup> Matrai pressure	Placing the finger
Undral	1/2 Matrai pressure	Pressing the finger
Murukkal	3/4 <sup>th</sup> matrai pressure	Twisting the finger
Viduthal	1 matrai pressure	Releasing the finger

Table no.1 – Type of matras used for marma pressure

### STANDARD OPERATING PROCEDURE

#### MARMA ABHYANGA

##### Purva Karma :

1. Check all the vitals of the patient.
2. Check the food taken is digested.

3. Keep at least 3 to 4 hours of gap after meals.
4. Cleaning of area to be operated with cotton, cloth or soft towel.
5. Noise free *Panchakarma* therapy room with one helper technician specially in case of female patient, one female technician should be there as per protocol.

#### Pradhaan Karma:

1. Make the patient lie down in prone position.
2. Advise him/her to feel relax and take stable breaths.
3. Apply mild pressure on *Marma* points with index finger/thumb/palm according to therapeutic pressure technique to stimulate the *marma* point.
4. Advise the patient to exhale on every stimulation with finger/thumb/palm (According to *Mathirai*<sup>8</sup> pressure) and inhale on releasing pressure.
5. After two rounds of initiation of *Marma* points, smear finger/palm with lukewarm medicated oil and gently apply over *marma* point.
6. Activate all the 5 *marma* points (*Kshipra*, *Gulpha*, *Indrabasti*, *Janu* and *kukundar*)<sup>8</sup> one by one 12/16/18 times/point according to severity for mild, moderate, severe respectively.
7. Give 3 sittings to patient in a day for 7 days regularly.

#### Paschat Karma :

1. Check all the vitals of the patient again.
2. Patients should take complete rest for at least 10 to 15 minutes.
3. Patient cannot take bath with lukewarm water after rest.
4. After treatment to each patient, it is necessary to touch the wall or any wooden object before treating the next patient, this is to avoid the transfer of the body heat from one patient to another.

#### Observations and results

After completion of one week of therapy, the patient had found significant relief in lumbar pain, tingling sensation and heel pain. Gait was also improved. The patients got 70-80 % symptomatic relief in pain.

Test	Treatment	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5
RUK	BT	3	4	3	3	4
	AT	0	1	1	1	0
STAMBHA	BT	4	3	3	4	4
	AT	1	0	0	2	1
TODA	BT	3	2	3	3	3
	AT	1	1	0	2	1
SPANDAN	BT	3	2	2	3	0
	AT	0	1	0	0	0

Table no.2 –Improvement chart of subjective parameters

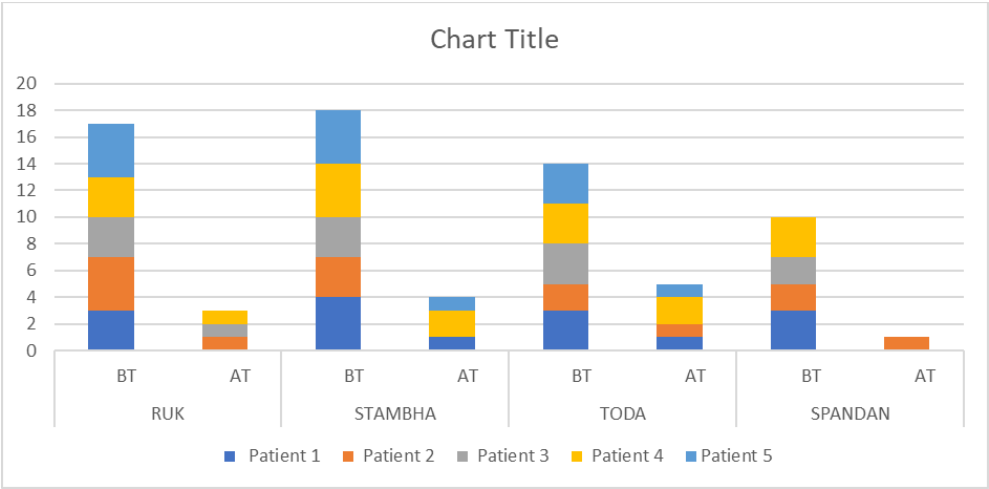


Diagram no.1 – Improvement chart of subjective parameters

Test	Treatment	Patient 1		Patient 2		Patient 3		Patient 4		Patient 5	
SLR test	BT	30 (R)	50 (L)	-ve	55	65	30	35	50	40	45
	AT	60	65	-	70	60	75	60	75	60	60
Flip test	BT	+	+	+	+	+	+	+	+	+	+
	AT	-	-	-	-	-	-	-	-	-	-
Slump test	BT	+	+	+	+	+	+	+	+	+	+
	AT	-	-	-	-	-	-	-	-	-	-
VAS Score	BT	7		6		7		6		7	
	AT	5		4		4		2		3	

Table no.3 – Improvement chart of objective parameters

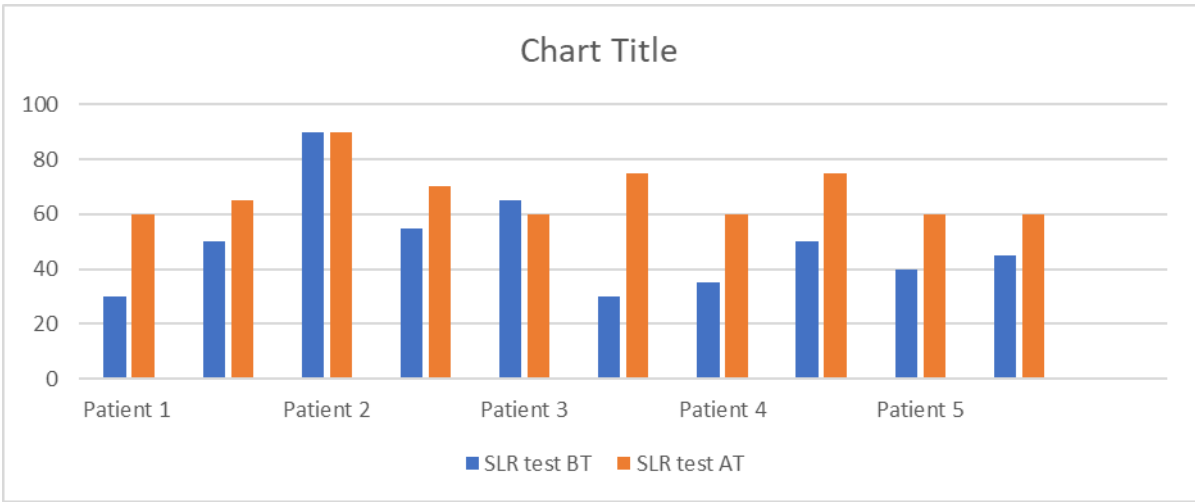


Diagram no.2 – Improvement chart of SLR TEST

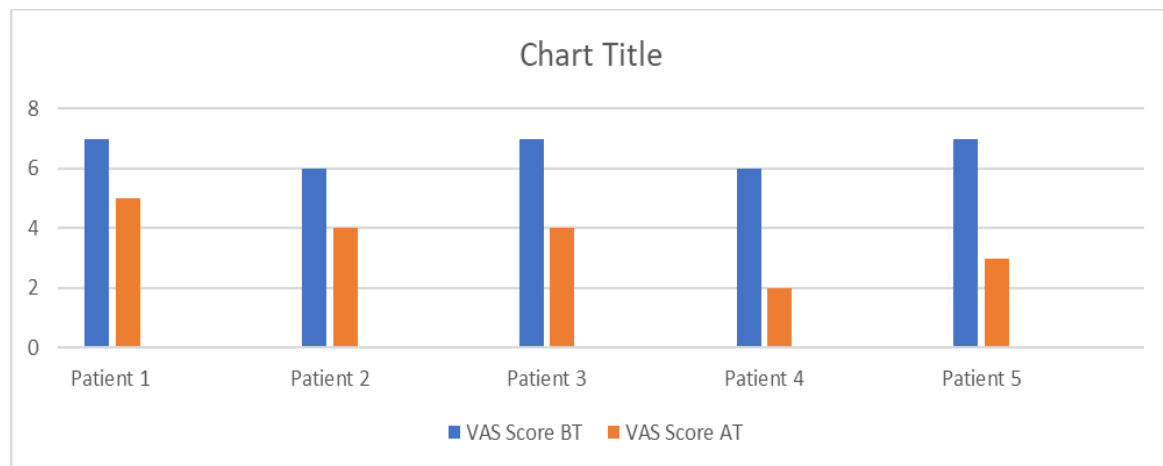


Diagram no.3 – Improvement chart of VAS SCORE

Movements	Treatment	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5
Forward Flexion	BT	30	35	35	40	30
	AT	45	50	45	55	50
Extension	BT	15	10	10	10	15
	AT	15	15	20	15	20
Right lateral flexion	BT	20	15	15	20	15
	AT	20	25	20	25	20
Left lateral flexion	BT	15	15	10	15	10
	AT	20	25	20	20	25
Right rotation	BT	5	5	5	5	5
	AT	5	10	5	5	5
Left rotation	BT	5	10	5	10	5
	AT	5	15	10	15	5

Table no.4 – Improvement chart of Range of movement (Lower back)

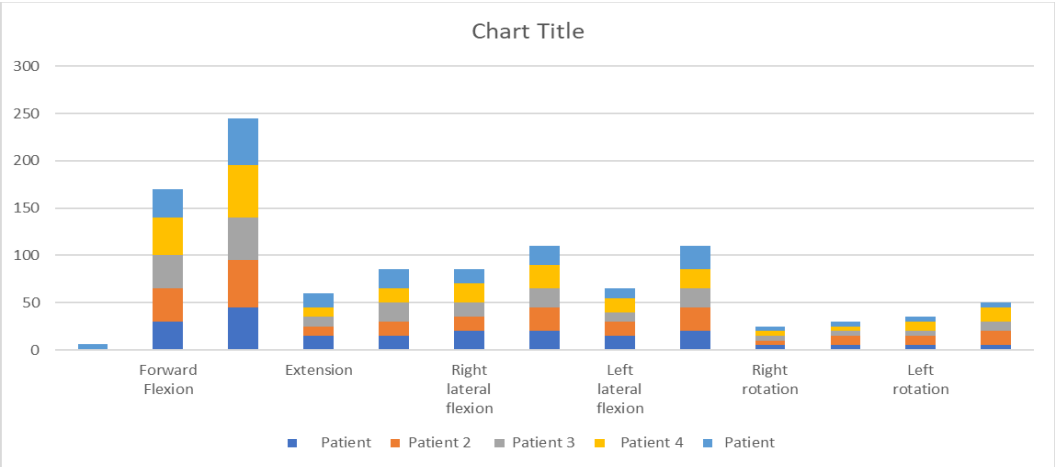


Diagram no.4 – Improvement chart of Range of movement(Lower back)

Picture no.1 , 2 & 3 showing marma stimulation of *Kshipra* , *Gulpha*&*Indrabasti*respectively.



1.



2.



3.



Picture no.4 & 5 showing marma stimulation of *Janumarma*and *kukundarma*

5.

## Discussion

In cases of *Gridhrasi*, five patients exhibiting classical clinical features such as pain, stiffness, tremors, and spasms have been observed to have *marmaabhogata* as the primary causative factor. *Acharya Charaka* has also mentioned that any *abhogata* involves the involvement of *vata* and *rakta* as the main building blocks in the pathogenesis of the disease, specifically in the context of *jwara* (fever).

*Vayu* (air) regulates the energy transmission between *marma* points. In the science of *marma*, the "*Dasavayu*" (ten types of *vayu*) are considered crucial for treatment. Among them, *Vyana* and *Apanavayu* play significant roles in the development of *VatajGridhrasi*. Disruption of the functions of these *vayus* affects the exchange, supply, and multiplication functions of *marma* points. When these functions are disturbed, it also affects the functioning of *Nadi* (channels), *prana* (life force), *vayu* (air), and *panchamahabhuta* (five elements).

In the human body, each part is interconnected through connecting tissues like ligaments and tendons, hence massage should be performed with this in mind. During a particular disease condition affecting a specific part, massage should be focused on that area.

*MarmaChikitsa*s based on Ayurvedic principles, including the *Panchamahabhutasidhanta* (doctrine of the five elements), the *AgnisomyaSiddhanta*, and the principles of *Vata* management.

According to the *varmmamshastra*, *varmmam* points are locations where a mixture of *panchabhoothams* (five elements), *dasavayus*, *nadis* (channels), *vaasi* (life energy), and *kundalini* is found. The energy found in these points is in the form of air and moderate heat with optimal water content. Disruption of this energy leads to diseases. Special stimulation techniques regulate and rejuvenate the functioning of *vaasi* in *varmmam* points. The stimulation begins with *kshipramarma*, which is sensitive and useful for various diseases, excluding sciatica.

After *kshipramarma*, *gulphamarma*, a *sandhi marma* located around the ankle joint, is stimulated. It is easily palpable on the medial and lateral aspects where the tarsal ligaments attach to the bone.

Then, *Indrabastimarma*(*Mansamarma*) is stimulated, which involves the gastrocnemius muscle, sciatic nerve, and tibial artery. This *marma* is considered the "second heart" of the body.

Similarly, *janu* and *kukundarmarma* (*sandhi marma*) are stimulated by promoting active blood flow to the site, facilitating faster healing.

The probable mode of action, according to modern science, is that activating or stimulating a *marma* point triggers ionic exchange within the area, leading to reflexes in sensory neurons. The network of sensory neurons then signals the hypothalamic-pituitary-adrenocortical axis, resulting in the activation of steroid hormones such as cortisol, endorphins, and serotonin. This process produces a relaxing effect and initiates the rejuvenation process at the site, ultimately improving the mechanical performance of the joint or limb.

"A *Marma* point is the junction between physiology and consciousness," as stated by Ed Danher, Director of the *Panchakarma* department at the Ayurvedic Institute in Albuquerque, New Mexico. From a biochemical perspective, touching the *marma* sites releases radicals, which in turn signals the body to produce relevant rejuvenating elements such as hormones and neurochemicals that promote healing of the body, mind, and consciousness.

## Conclusion

According to ayurvedic treatment principle , snehanand bastiis the line of tretament for vata disorders . The overall effect of the marma therapy projects that sciatica ( Gridhrasi ) can be cured effectively with collaborative approach of various Panchakarma procedures including marma massage and matrabastiwith murchit til tail respectively .

Marma therapy has promising results in musculoskeletal disorders , cost effective , feasible , can be applied anytime , with no side effects if applied properly and almost no special infrastructure is required . This can be a



universally sustainable type of science which can be used for therapeutic and preventive aspect of health , specially in Panchakarma stream , it will be a super specialised treatment protocol.

## References

- [1] Gridhrasi ( Sciatica ) and associated conditions – Dr. G . Purushothamacharyulu& Dr. ArundhathiPurushotham
- [2] Golwalla A, Golwalla S; Golwalla's Medicine: Reprint ed-23rd Mumbai, 2011:514
- [3] Charaka - Charakasamhita with commentary of charakapanidatta and yoggendranathsen chapter 28.
- [4] Management of katigraha ( low back pain ) with kolakulathadichoornapindasweda – S Divya , Sonawane N , Jahagirdar S , NR Navoday R .
- [5] MarmaChikitsa by Central Council for Research in Ayurvedic sciences – Chapter 6 – Nadi marmaabhyangam.
- [6] Bhaishajayatanawali by KavirajAmbikadattshastri – Jwaraprakran – Jwarachikitsa – Page no. 186 .
- [7] Basic concepts of Vethasatthi Medical Varmalogy – Part 2 – chapter 6.
- [8] Role of Panchakarma in management of Gridhrasi
- [9] Imlikumba, Parappagoudra Mahesh1, BA Lohith2, K Singha3, S Lalravi4.
- [10] 1,3,4 Post Graduate Scholar, 2Associate Professor & HOD, Dept. of Panchakarma, SDM College of Ayurveda & Hospital, Hassan, Karnataka, India.
- [11] Basic concepts of Vethasatthi Medical Varmalogy – Part 3
- [12] Ayurveda and Marma therapy by Dr. David frawley , Dr. SubhashRannade and Dr. Avinashlele
- [13] PadmaAyur Varma Nilayam – MarmaChikitsa in Gridhrasi aka sciatica – <https://drrangaprasadbhat.blogspot.com/2014/02/synopsis-of-management-of-grdhrasi.html>
- [14] Basic concepts of vethasatthi medical varmalogy – Dr. N. Shunmugom , Thirumoolarvarmalogy institute, Coimbatore , Tamil Nadu , India
- [15] Marma points of Ayurveda by Dr Vasant Lad <http://www.narayana – publishers.com / Marma-points-of - Ayurved/Vasant-Lad/b9673/partner/leseprobe>