# Scorpion Bite and Management

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# Scorpion Bite and Management



#### **Incidence**

- Common in tropical and subtropical regions of the world
- India-Maharashtra, Karnataka, Tamilnadu, West Bengal, Pondicherry
- 86 species in India
- Common in India
- Mesobuthus tamulus -Red
- Palamnaeus swammerdami -Black (less poisonous)
- Cardiac manifestations dominate in India
- Neurologic features dominate-S.Africa
- Season -Summer, winter, night
- ▶ Fetality-3-22%



#### **Clinical Features**

- Evolve-30min-6hrs
- Subside -within a day or 2
- Local manifestations sever pain, paresthesia
- Systemic features –
- Cholinergic storm-fever, Hypotention, sweating, vomitting, priapism, shivering, salivation, bradicardia
- Adrenergic stimulation -starts after 4hrs and lasts for 48hrs

Tachycardia, hypertention, myocardial dysfunction, arrythmias, Cardiogenic shock, pulmonary edema, altered conciousness, hypotention with or without pulmonary edema

Complications-encephalopathy, convulsions, aphasia, hemiplagia, cerebral haemorrhage, DIC, respiratory failure



| Grading Severity of scorpion bite |  |  |  |
|-----------------------------------|--|--|--|
| Grade                             | Clinical Features  |  |  |
| Grade I                           | Localised pain   |  |  |
| Grade II                          | Hypertention, sweating vomitting, priapism, fever, shivering |  |  |
| Grade III                         | Cardiogenic shock, pulmonary edema, altered conciousness     |  |  |
| Grade IV                          | Tachycardia, hypotention with or without pulmonary edema     |  |  |



## Investigations

- Blood-Serum electolytes-hyperkalemia
- Lipid profile-low serum cholestrol, triglycerides, raise in free fatty acids
- Elevated transaminases, LDH, amylase
- For myocardial dysfunction-ECG, X-Ray,ecocardiography,CT scan



## Management

- Symptomatic relief
- No specific antivenom available
- Local measures-cleaning
- NSAIDs,icepacks, Xylocane infiltrates,dehydroemetine (counterirritant)
- Streptomycin (neuromuscular blockade)



#### General measures

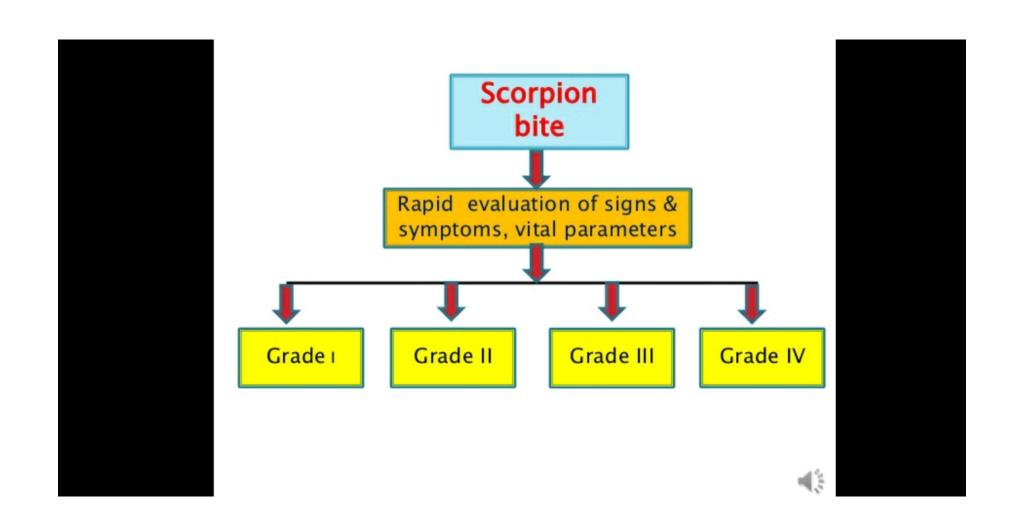
- O2 administration by nasal cannula/face mask in case if respiratory distress, impending shock
- Frequent monitoring of vitals, fluid balance, blood electrolytes, pH, liver, kidney function, DIC
- Sedation: Diazepam, (GABA opens ion channels, antegonizing toxin action)
- Long acting sedatives are avoided
- Drug therapy -Prazosin, selective alppha-1adrenergic blocking agent is true pharmacological antidote to control adrenegic affects like tachycardia, hypertention, incipient myocardial failure with pulmonary edema
- 30µ/kg oral every 4-6hrs for 24 hr √(Tab Prazopress-1 mg,2mg etc)











#### Grade1

Localized pain, sweating, edema,no systemic symptoms

Mild pain- ice pack

Sever Pain-Lignocane using ring block, with or without diazepam and NSAIDs

#### Grade2

Parasympathetic stimulation:vomitting,sweati ng,salivation,bradycardia,hy potention,priapism

> Oral fluids, IV fluids-if poor intake

Prazosin (30µgm/kg)4-6hr for 24 hrs Oral PCM, Avoid atropin unless symptomatic bradicarida,

#### Grade 2

Sympathetic stimulation: cold extrimities, hypertension, tachycardia

Oral fluids, IV fluids-if poor intake, Monitor symptoms

Prazosin (30µgm/kg) repeat when necessary Oral paracetamol

#### Grade 3

Cold Extremities, Tachycardia, hypotention/hypertention, Pulmonary edema

O2 therapy,CVP guided fluid therapy,PPV, Monitor closely

Dobutamine 10µgm/kg/min Nitroglycerine (0.5µg/kg//min) Prazosin 30µg/kg repeat when necessary

#### Grade 4

Tachycardia, hypotention, with/with out pulmonary edema

O2 therapy,

CVP guided fluid therapy,PPV,

Monitor closely

Dobutamine 10µ/kg/min
Prazosin 30µg/kg repeated
when necessary

### Vrishchika Visha

- One among the Jangama visha
- Done among keeta visha
- Types 3
- > Based on strenth of the poison
- Manda-12
- ▶ Madhyama -3
- ▶ Teekshna-15



| Type                   | Number & Name   | Clinical feature of bite   |  |  |
|------------------------|---|--|--|--|
| Manda<br>visha<br>12   | krishna,shyava,kar<br>bura,pandu,gomut<br>raabh,karkasha,me<br>chaka,peeta,dhoo<br>mra,romasha,shag<br>valabah,rakta,shvet<br>odara | Vepathu,Gatra sthamba<br>Krishna raktaagamana<br>Shaka dashta vedana<br>Daha,Sweda<br>Damsha ,Shopha,Jvara |  |  |
| Madhyama<br>visha<br>3 | shveta,peeta,kapila<br>dhoomrodara,with<br>3joints  | Jihva shopha<br>Bhojanasyavarodha<br>moorcha   |  |  |
|                        |   | <b>■</b>   |  |  |

Teekshana Just like snake visha Shveta, chitra, shyamal poisoning 15 a,lohita,rakta,shveta, withall 7 stages Rakta, neelodar, peeta Leading to death rakta,neelapeeta,rant **Highly poisonous** aneela,neealashukla,r Sphota, Branti, Dah akta,babru having Javara, Reddish one joint, Two joints ,multi blackish joints, multi colured discoloration of the srotas Death immediately



#### Mandavrishcika damsha chikitsa

(Su

.Ka.8/68-74)



#### Mandavrishcika damsha chikitsa

(Su

.Ka.8/68-74)



- Lepa -paste made of matulunga, surasagra (tender tulasi leaves), gomutra
- Vidarigana sidda lepa/, taila (sukoshna)
- विदारिगन्धा विदारी विश्वदेवा सहदेवा श्वदंष्ट्रा पृथक्पणी शतावरी सारिवा कृष्णसारिवा जीवकर्षभकौ महासहा क्षुद्रसहा बृहत्यौ पुनर्नवैरण्डो हंसपादी वृश्चिकाल्यृषभी चेति ॥४॥ विदारीगन्धादिरयं गणः पितानिलापहः ॥ शोषगुल्माङ्गमदीर्ध्वश्वासकासविनाशनः ॥४॥Au.Su.38/4.5
- Svadana -hot paste of gomaya
- Paana-khoudrayuta sarpi-bahuvata
- ksheera with bahu sharkara-in bahu pitta
- chaturjata samyukta gudodaka hima
- saguda ksheera hima
- Sechana -chaktataila- tila taila obtained from grinding of chakra
- Upanaha -visha hara shirishadi gana
- **Dhooma** -eggshell, saindhava, tila ,sarpi
- Dhoopan -kusumba pushpa, rajani, nisha, kodrava, ghruta

# Shirishayoga

```
    सम्लपुष्पाङ्कुरवल्कबीजात् क्वाथः शिरीषात् त्रिकटुप्रगा
ढः |
सलावणः क्षौद्रयुतोऽथ पीतो विशेषतः कीटविषं निहन्ति |
|८१||
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Su.Ka.5/81



# Shirishayoga

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    सम्लपुष्पाङ्कुरवल्कबीजात् क्वाथः शिरीषात् त्रिकटुप्रगा
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|८१||
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Su.Ka.5/81



## Other Yogas in practice

▶ Bilvadi gulika-A.H.U.Sarpavisha pratishedha -84

बिल्वस्य मूलं सुरसस्य पुष्पं फलं करञ्जस्य नतं सुराह्मम् फलात्रक व्याषानशाद्वय च बस्तस्य मूत्रेग सुसूच्मिष्टम् ८४ भुजङ्गलूतोन्दुरवृश्चिकाद्यैर्विसूचिका जीर्गगरज्वरैश्च ग्रार्तान्नरान्भूतविधर्षितांश्चस्वस्थीकरोत्यञ्जनपाननस्यैः ८४

- Eladi gana -A.H.Su shodhanadi gana
- Dashanga lepa
- Dashanaga gulika
- Aragvadarishta
- Lodrasava











# Ugra & madhyama vrishchikadahtaChikitsa

उग्रमध्यविषैर्दष्टं चिकित्सेत् सर्पदष्टवत् ।
 आदंशं स्वेदितं चूर्णैः प्रच्छितं प्रतिसारयेत् ॥६७॥
 रजनीसैन्धवव्योषशिरीषफलपुष्पजैः |६८।

Su.Ka 67

- Treatment just sarpadashata
- Pratisarana of the site with churna of Rajani, saindhava, vyosha, shirisha kala and pushpa



- Bandhana -4 angula above the site of bite with cloth
- Whre bandhan is not possible thera Achooshan, chedana, dahana is done
- Mantra bandhanan
- Sarpa visha vega chikitsa
- Agada prayoga
- Mahagada
- Ajitogada
- Tarkshyogada
- Rishabogada



# Sarpadashta chiktsa

| Vega      | Site of afliction<br>,lakshana  | Chikitsa                             |
|-----------|---|--------------------------------------|
| Prathama  | Rakta<br>Krisnata<br>Pipeelika prisravana in<br>the anga                            | Raktamokshana<br>(prchanna/shronga)  |
| Dviteeya  | Mamsa<br>Krishnata shopha,<br>granthi   | Madhu +sarpi pana                    |
| Triteeya  | Meda,shirogourava,<br>sweda, chakshur<br>grahana                                    | Nasya +anjana                        |
| Chaturtha | Koshta, dooshana of<br>kapha pradhana dosha<br>Tandra, praseka,<br>sandhi vishlesha | Vamana followed by yavagu<br>prayoga |

| Panchama | Asthi, agni , prana<br>dooshana<br>Parva bedha, hikka,<br>daha   | Sheetopachar &teekshna yavagu  |
|----------|--|--|
| Shashta  | Majja ,grahani<br>dooshana<br>Gatra gourava,<br>atisara,<br>hritpeeda,moorcha  | Sheetopachar &teekshna yavagu  |
| Saptama  | Shukra, vyana<br>prakopa, uproots<br>kapha from<br>kaphapradesha,<br>leading to cfracture<br>of kati, prishta,,<br>loss of function.<br>Excess salivation,<br>sweating, shwasa<br>nirodha, | Shiro shodhana with avapedana<br>nasya<br>Teekshna anjana<br>Rakta sravana with teekshna shstra<br>at the region of moordhni in the<br>shape of crow's leg |

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# Thank You