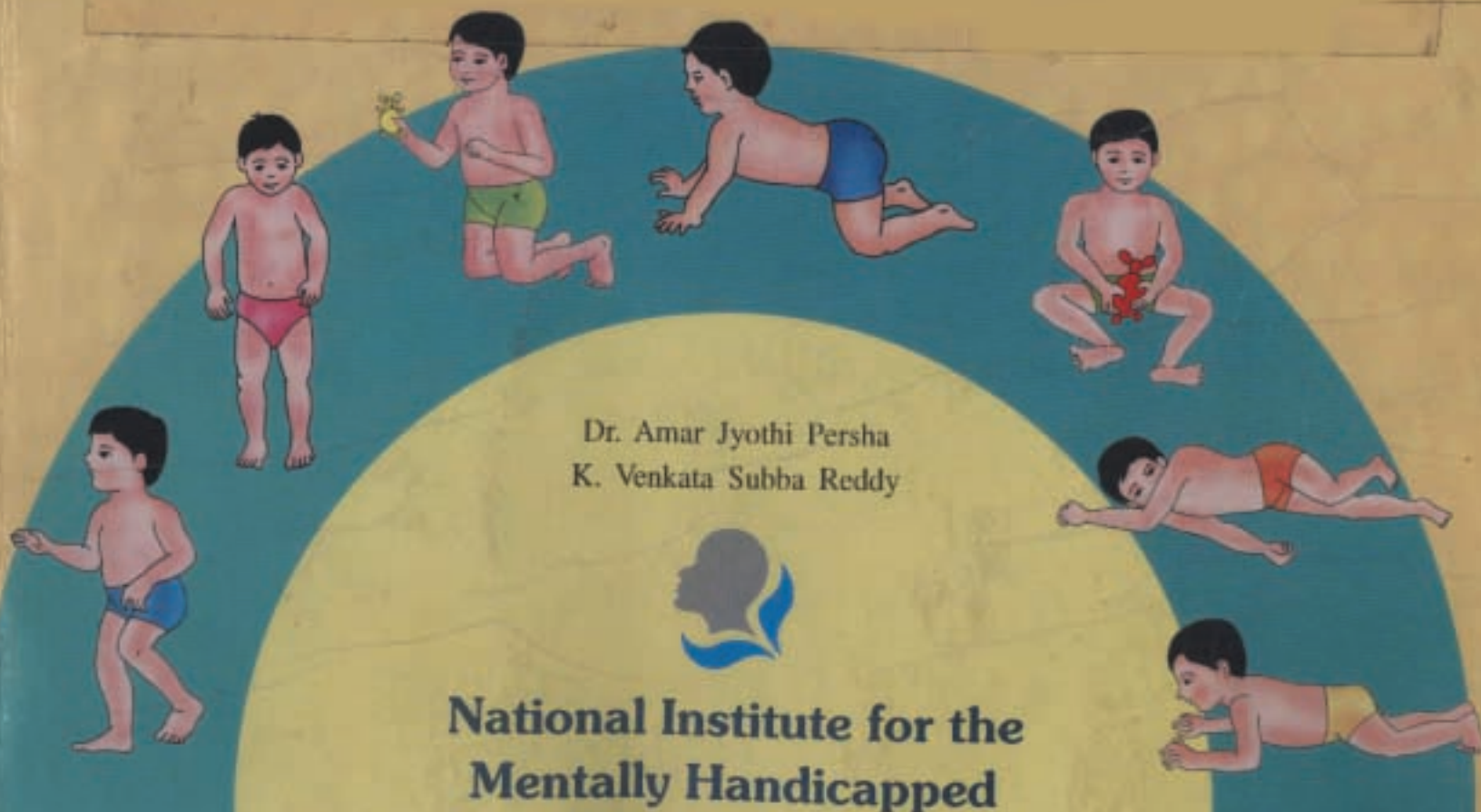


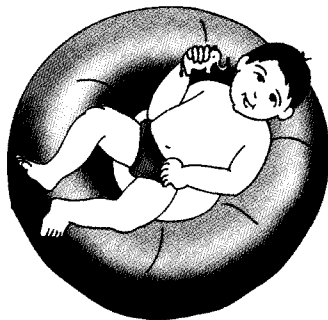
Positioning and Stimulation activities for infants and young children with Motor problems



Dr. Amar Jyothi Persha
K. Venkata Subba Reddy



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Mentally Handicapped**



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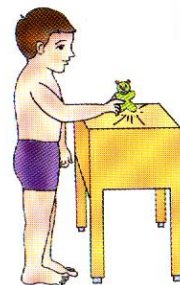
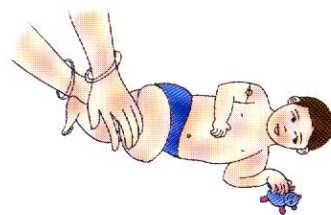
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डॉ. एल. गोविन्द राव
निदेशक
Dr. L. GOVINDA RAO
Director

राष्ट्रीय मानसिक विकलांग संस्थान

(सामाजिक न्याय और अधिकारिता मंत्रालय, भारत सरकार)

**NATIONAL INSTITUTE FOR THE
MENTALLY HANDICAPPED**

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24th June, 2003

FOREWORD

Awareness on disability and rehabilitation is very crucial for the parents for the development of the child with disabilities. Along with the awareness, it is also necessary for the parents to identify traditional child rearing practices which are detrimental to children with developmental disabilities. This is however not to say that all the traditional child rearing practices are not helpful. We at NIMH have been striving to adhere to our values of ensuring 'informed parent'. In this direction, we have been regularly doing the self appraisal of the models and materials developed to help the children with disabilities for development. One of the grey areas is relating to the improper positioning and handling of children during the early childhood.

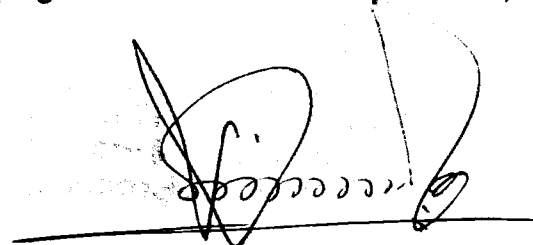
In children with developmental disabilities, one of the major concerns is the motor problem. Many of the motor problems faced by these children are due to improper positioning and handling during the early childhood. Positioning a child with stiffness or floppiness helps in bringing the body tone towards normal. This normalization of the tone

Contd.....

helps in easier movement, balance and learning new skills. It is important to know the correct positioning and handling the children with motor problems.

This booklet gives abnormal positions and the appropriate corrections. The illustrations are such that a mother can identify the problem in her child. The corrected positions are given in simple language and in steps, making it easy to understand and practice.

Hence, this book has evolved to develop positioning and stimulation activities for rural infants. The book will be useful to parents, teachers, community level workers and other professionals whose concern is to be instrumental in helping children with motor problems, develop to their maximum potential.



L.GOVINDA RAO, Ph.D.,

Preface

Movement and play experiences provide the foundation for the development of motor, sensory, perceptual, cognitive, language and social skills for infants and young children. For the infant and young child with physical or other developmental delays, these experiences are compromised. Therefore, these children rely on adults to help in play and stimulation. This means that parents and early intervention professionals need to work together as a team to create opportunities for movement and play. The purpose of positioning is to provide good body alignment and make movements in an easy manner. This will help the child to interact with the environment and enhance learning. Therefore, it is important to teach and demonstrate to the parents, the importance of positioning and provide the stimulation activities specific to individual positions. These will provide opportunities for learning through play.

Parents of young children with developmental delays many a time feel inadequate in providing stimulating activities for their children. In order to enhance their skills, a compilation of various activities in different positions is proposed. The activities are simple and easy to follow with plenty of illustrations, which will build up parents competencies.

Usefulness of the Manual: Many a time parents fail to pay attention to the normal development and hence fail to realize that the child is delayed in development. Once faced with problems, parents tend to feel inadequate in handling the child or promoting normal development. With non-availability of professional help within the reach, the frustrations in the parents mount up. In order to alleviate the problems faced by parents and in order to reach help to the parents and to enhance the child's development this booklet has been formulated. This will enable the parents or grass root level functionaries in positioning the child and involve the child in play and stimulation activity which help the child to reach optimal potential of development.

This book will provide simple techniques to parents which they can undertake in their home environment involving day to day activities. It not only enhances development but also reduces the chance of secondary motor and learning problems (like bad posture, contractures and deformities). It is to be used as a guide in home based programs, which will also be cost effective. Hence this booklet has been developed. This manual is intended for use by the parents, and grassroot level functionaries.

Dr. Amar Jyothi Persha

Acknowledgements

We are indebted to many people without whose help this book would not have been possible.

Our heartfelt gratitude and thanks to L.Govinda Rao, Ph.D., Director, NIMH for his constant support and encouragement to carry out this project and development of this book.

A special note of thanks to the children who are our focus. It is this impetus that has lead to the culmination of this book.

Our sincere gratitude to the parents, without whose active association this book would not have been meaningful.

Our thanks to the administration department, NIMH for all the support.

We are also thankful to the artist G.B. Anand for designing this book and to the printers for printing this book.

Dr. Amar Jyotbi Persba
K. Venkata Subba Reddy

Among abnormal postures are further grouped into

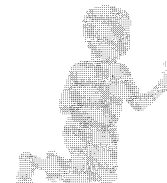
1. **Stiff child** : description and pictorial depiction, correction methods on the opposite page, given in stepwise manner to follow with pictorial depiction
 2. **Floppy child** : Description and pictorial depiction, correction methods on the opposite page, given in stepwise manner and with pictorial depiction
- Color code is given to the abnormal postures to 'enhance recognition and categorization'
 - ✦ Stiff child-pictures are in red color
 - ✦ Floppy child-pictures are in blue color
 - ✦ Corrective methods-pictures are in multicolor
 - To make the abnormalities and corrections eye catching-abnormal postures are marked with **X** and correction pictures are marked with **✓**
 - At the end of each subsection under the title of "Activities for stimulation" appropriate sensory stimulation for that posture are given as
 - ✦ Visual
 - ✦ Auditory
 - ✦ Tactile

Authors



About the book

- This book is designed for the parents and grass root level functionaries.
- The language used is simple.
- The illustrations for each of the normal and abnormal postures is clear and self explanatory.
- The introductory section talks about the motor problems and their classification.
- Simple methods of normalizing muscle tone are listed.
- The contents are organized according to the stages of motor development.
 - ✦ Head Control
 - ✦ Rolling
 - ✦ Sitting
 - ✦ Crawling
 - ✦ Kneeling
 - ✦ Standing
 - ✦ Walking
- Each heading is further organized as
 - ✦ Normal postures-Description and pictorial representation
 - ✦ Abnormal postures-Description and pictorial representation



Introduction

Brain injury in children may result in delayed and abnormal development. Abnormalities in motor area are observable and can be identified early. These children have problems in

- movement of parts of body
- locomotion (moving from place to place)
- maintenance of body posture
- maintenance of body balance

Generally, these children with motor problems are categorized into two broad groups.

1. Stiff child

These children may have any of these signs

- Increased tension (tone) in the muscles
- Stiffness in different parts of the body
- Arching of the trunk and head thrown back
- Hips and knees extended and stiff
- Hands held close to the body
- Poor movement and balance

For some children stiffness will be present in particular part of the body.

Example :

- All the four limbs (legs and hands) and body
- One half of the body
- More in lower limbs (legs) than Upper limbs (hands).

2. Floppy Child

These children may have

- Low tension (tone) in the muscles
- Loose muscles and joints
- More base of support
- Poor action
- Poor movement and balance

The basic problems arise because of abnormal tension in the muscles. This leads to abnormal postures and difficulty in movement. If the muscle tension is brought towards normalcy, movement improves which helps in development and learning of the child. There are different methods to normalize tone.

1. Relaxation for stiff muscles.
2. Correct positioning of the body.
3. Stimulation for floppy muscles.

Relaxation Activities to decrease stiffness in muscles in stiff children

Children who have increased tone most of the time hold their bodies stiff. They first need relaxation activities before starting any positioning.

Some of the activities that will help relaxation or reduction of tone in the child are:

- Slow, regular, rocking in a hammock
- Slow, regular, soft music / lullaby
- Soft touch and gentle handling
- Slow swinging on the swing
- Slow stroking of body with soft textures like cotton, velvet materials.
- Holding child close to the parent's body, and more secure and comfortable positions.
- Any gentle, slow, rhythmic activity (auditory, visual, tactile, and vestibular) will reduce the stiffness of the child and make the child more receptive to the therapy.
- Like some of the positioning such as sitting, can be done in a combination with one of the relaxation activity.
- Slow vertical rotation
- Water bed and bean bag play

Activities to build up tone (increase tone) - in floppy children

The problem with children who have reduced tone, is their inability to maintain a posture, as their capacity to hold their bodies against gravity is very less.

Some activities that will help increase the child's tone are

- Fast, vigorous swinging
- Fast, vigorous, spinning and rocking
- Fast, rock music (more beats than melodies)
- Play with the child by bouncing him up and down.
- Increase the amount of stimulation activities given to the child.
- Jumping on trampoline
- Jumping through space
- Jumping play
- Ball pool activities
- Vigorous massages

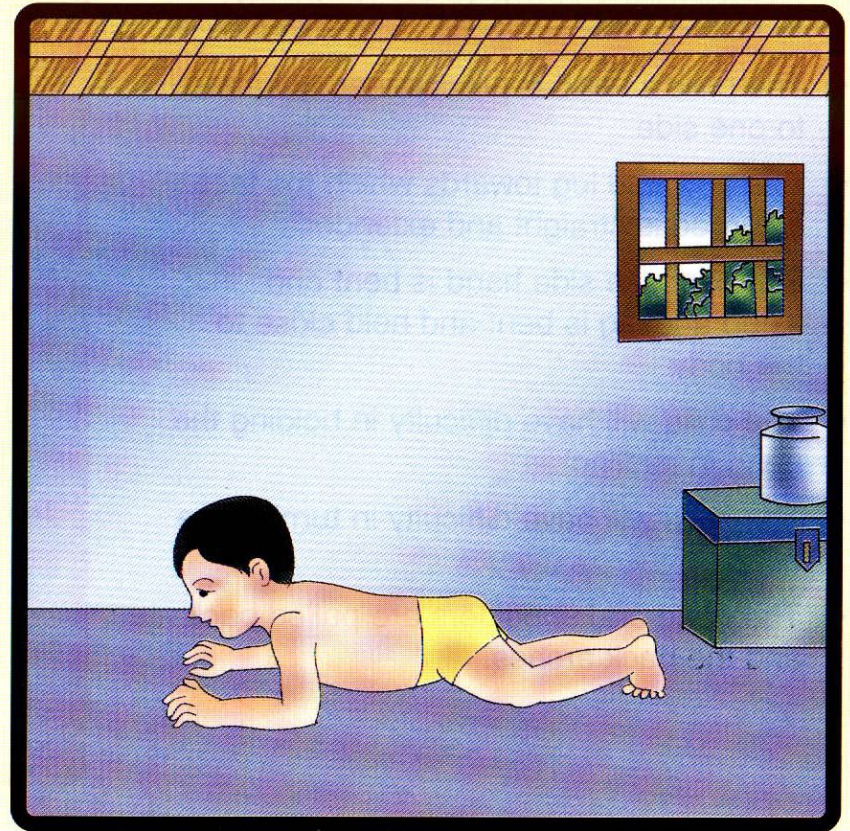
HEADCONTROL

NORMAL CHILD'S HEAD CONTROL

With normal head control the child is able to :

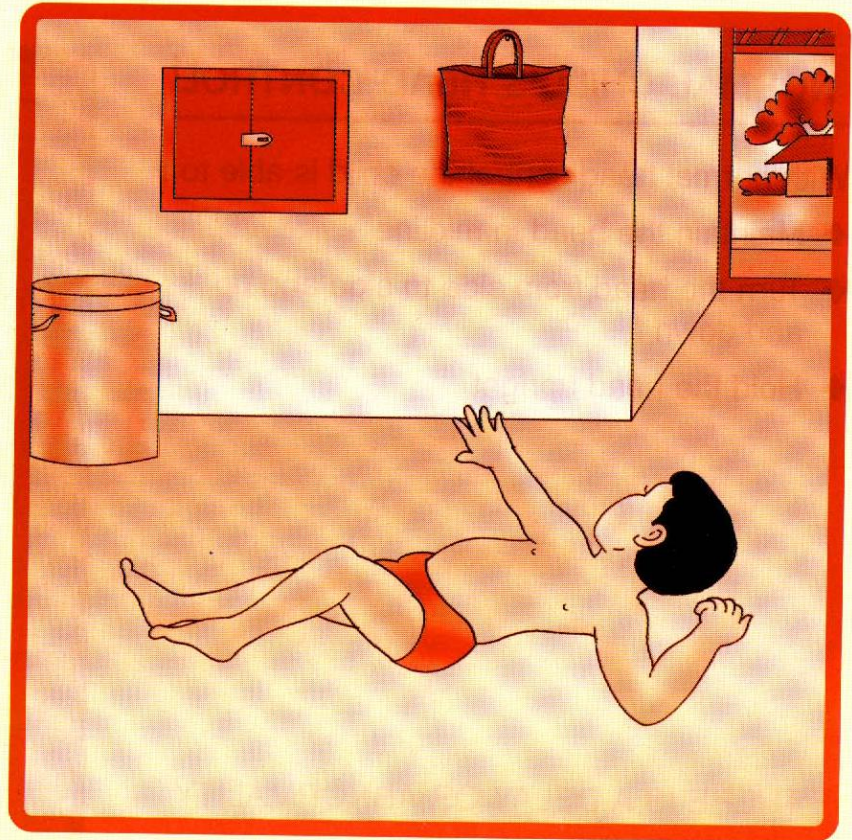
- ❖ Maintain the head in midline
- ❖ Turn the head from side to side and up and down
- ❖ Hold the head upright

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP**



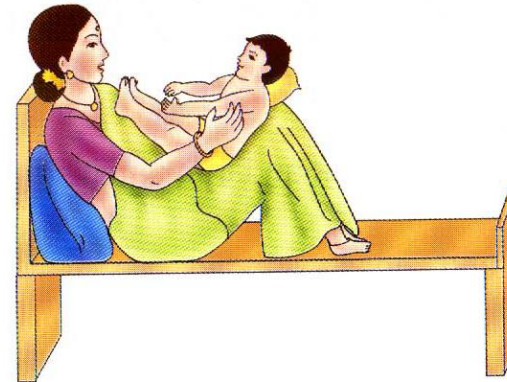
Abnormal Position (Stiff child)

- ❖ The child's head is predominantly turned to one side.
- ❖ The arm and leg towards which the face is turned is straight and extended
- ❖ The opposite side hand is bent and fisted and leg is bent and held close to the body
- ❖ The child will have difficulty in holding the head in midline
- ❖ The child will have difficulty in turning the head.
- ❖ The head and shoulders are pulled back and the back arches.



Correction

- ❖ The caregiver sits with hips and knees bent and back supported
 - ❖ The child is made to sit in the caregiver's lap
 - ❖ Child faces the caregiver.
 - ❖ Legs are placed straight on the caregiver's chest
 - ❖ Child's back is supported by caregiver's legs
-
- ❖ The child is made to lie in a jhula or a hammock, by tying two ends of a sheet to two poles or the bed posts,
 - ❖ He can sleep or play in it.
 - ❖ Head is placed higher and bent forwards. Prevents head from being pulled back.
 - ❖ Back is rounded. This avoids arching of the back



Use activities for relaxation

Abnormal Position (Stiff child)

The child should not be carried :

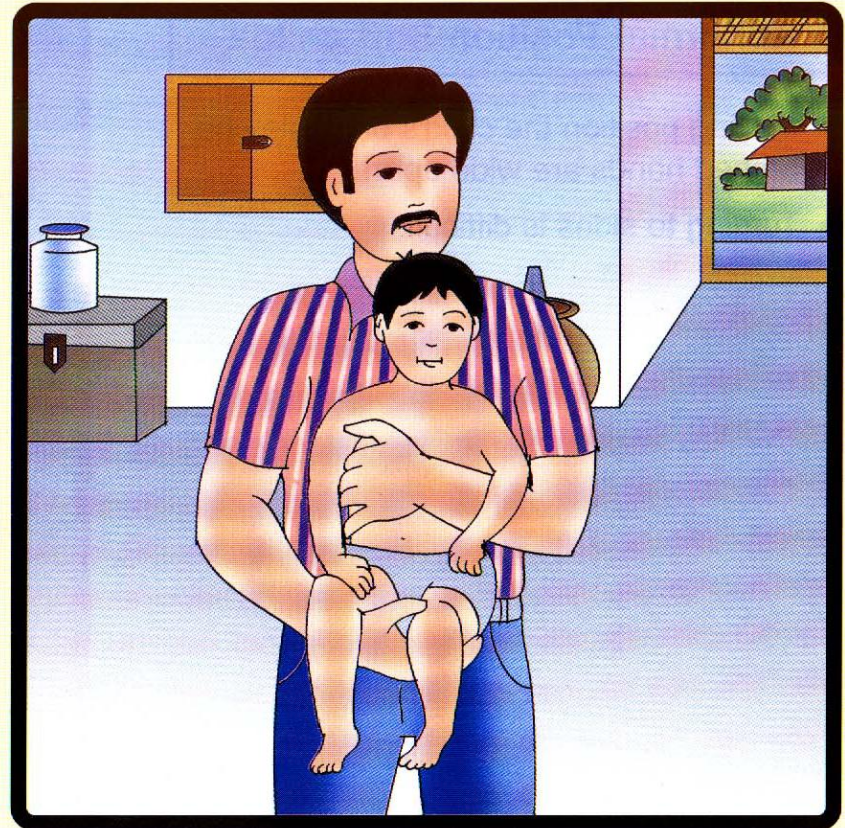
- ❖ With head falling back and trunk arching backwards.
- ❖ With hips and knees extended.



Correction

The child should be carried :

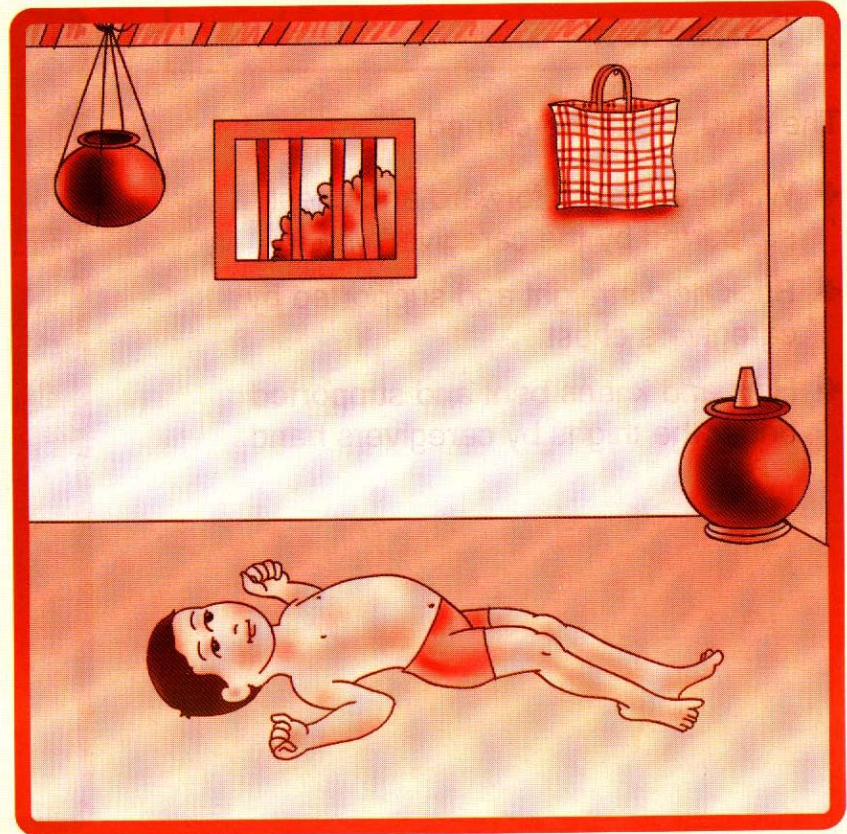
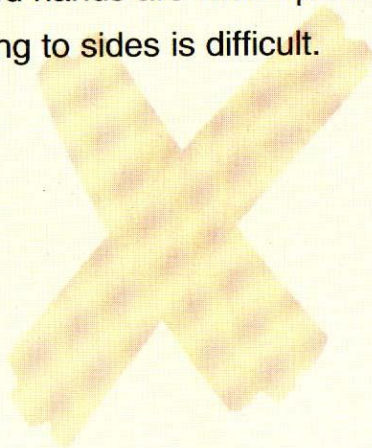
- ❖ With face facing forward and chest supported by the caregiver's hand
- ❖ Back held straight and supported by caregivers chest
- ❖ Hips and knees bent and supported under the thighs by caregivers hand



Use activities for relaxation

Abnormal Position(Stiff child)

- ❖ In lying position the child's back may be arched hands are wide apart.
- ❖ Turning to sides is difficult.



Correction

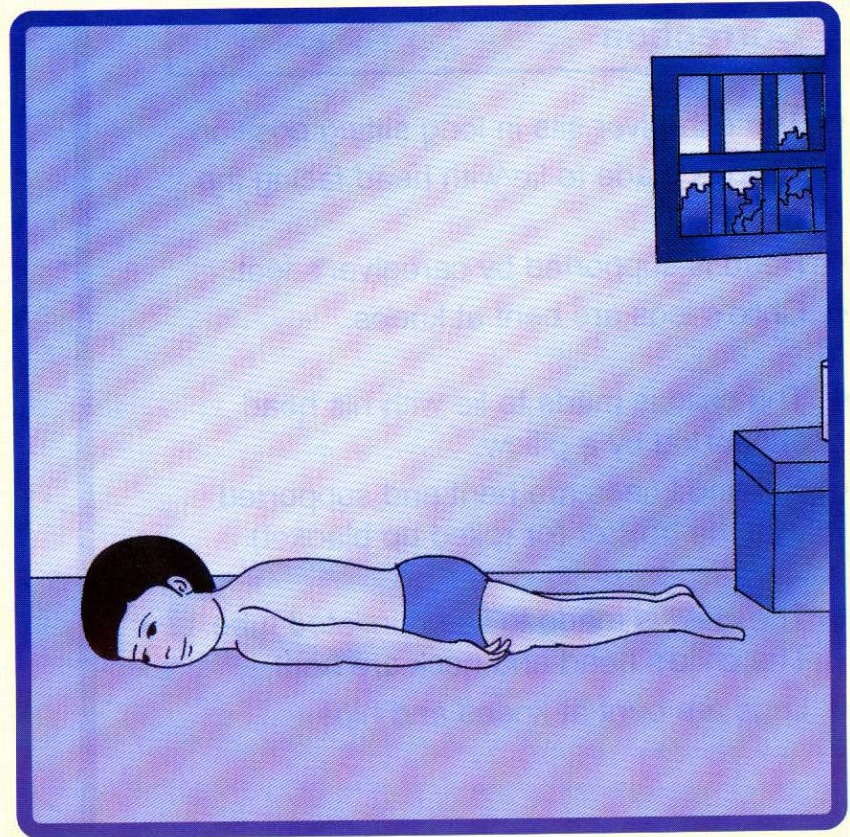
- ❖ The caregiver sits in long sitting position.
- ❖ Child is made to lie with head facing the caregiver.
- ❖ Head is supported by caregiver's feet.
- ❖ Child's legs are bent at knees.
- ❖ The child is made to lie with his head supported by a pillow.
- ❖ Hip and knees are bent and supported with the bolster (or rolled up blanket)
- ❖ The child is made to lie on inflated tube.
- ❖ The child's head and neck are bent
- ❖ Legs are bent at knees and hips



Use activities for relaxation

Abnormal Position (Floppy child)

- ❖ The child lies on his tummy. Head and shoulders are pressed down against the floor
- ❖ Arms tucked underneath his body. Is unable to lift the head, back, and shoulders
- ❖ Cannot bring arms forward to take weight on them



Correction

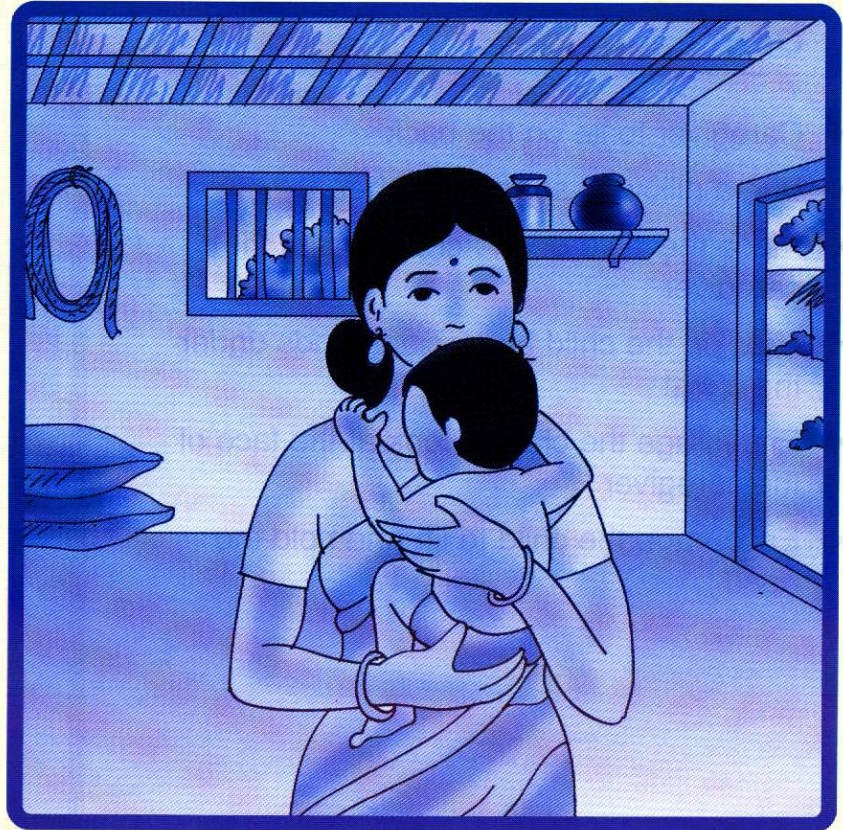
- ❖ Caregiver to lie on the back
- ❖ Use a pillow to support the head
- ❖ Place the child on the chest facing the caregiver
- ❖ Hold up the child by placing hands under the chest
- ❖ Encourage the child to look at the face of the caregiver
- ❖ Encourage the child to lift and hold the head



Use activities to build up tone

Abnormal Position (Floppy child)

- ❖ Incorrect way to carry a ' floppy ' child who has no head or trunk control.
- ❖ Head falling on the chest
- ❖ Head falling back
- ❖ Trunk bent forward
- ❖ Rounded back
- ❖ Legs held wide apart or hanging down



Correction

- ❖ The correct way to carry a 'floppy' child his legs are bent and held together
- ❖ Firm support is given at the hips
- ❖ This helps the child to extend his head and back



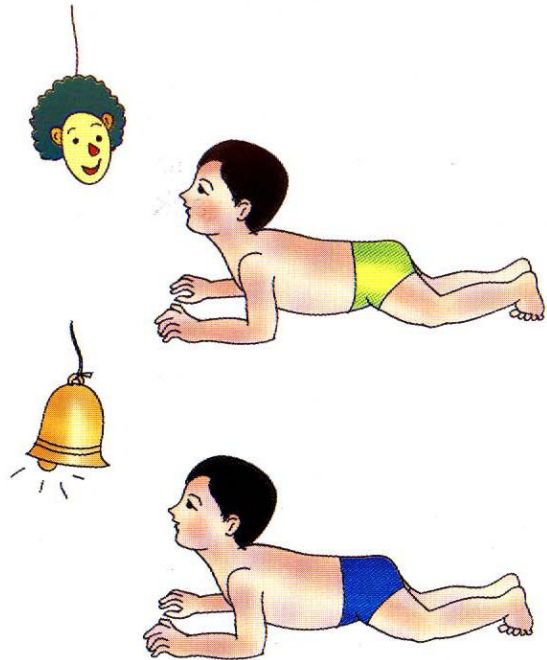
Use activities to build up tone

Activities for Stimulation

Visual : Stimulate the child to lift his head up and watch the mother's face or bright colored toys. Stimulate the child to lift his head upwards and watch himself in mirror, placed above his head. In this position the child is able to see persons and faces in front, track toys or objects from one side to another, see self image in the mirror.

Auditory : For auditory stimulation sing or talk to the child as much as possible. Musical toys, alarm clocks can also be used for auditory stimulation. These help the child to turn towards the sound, track sounds, respond to calling, Helps in movement of the head upwards and from side to side.

Tactile : Stimulate the child to touch the face of the mother and tickle the child at the neck. Rubbing on the back of the neck may help in lifting the head.

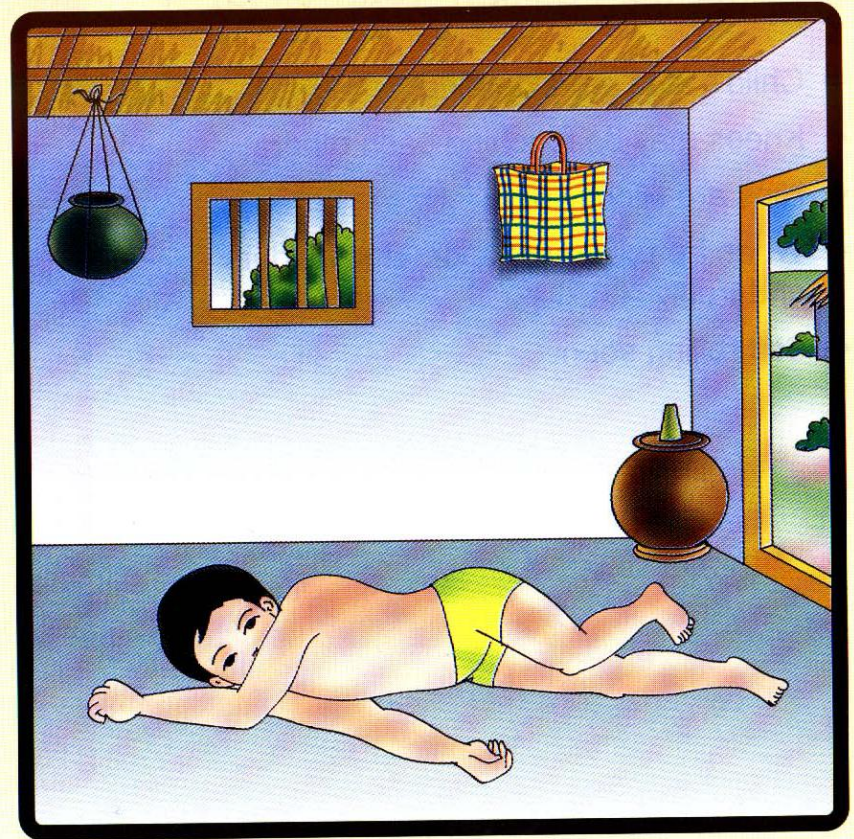


ROLLING

NORMAL CHILD ROLLING

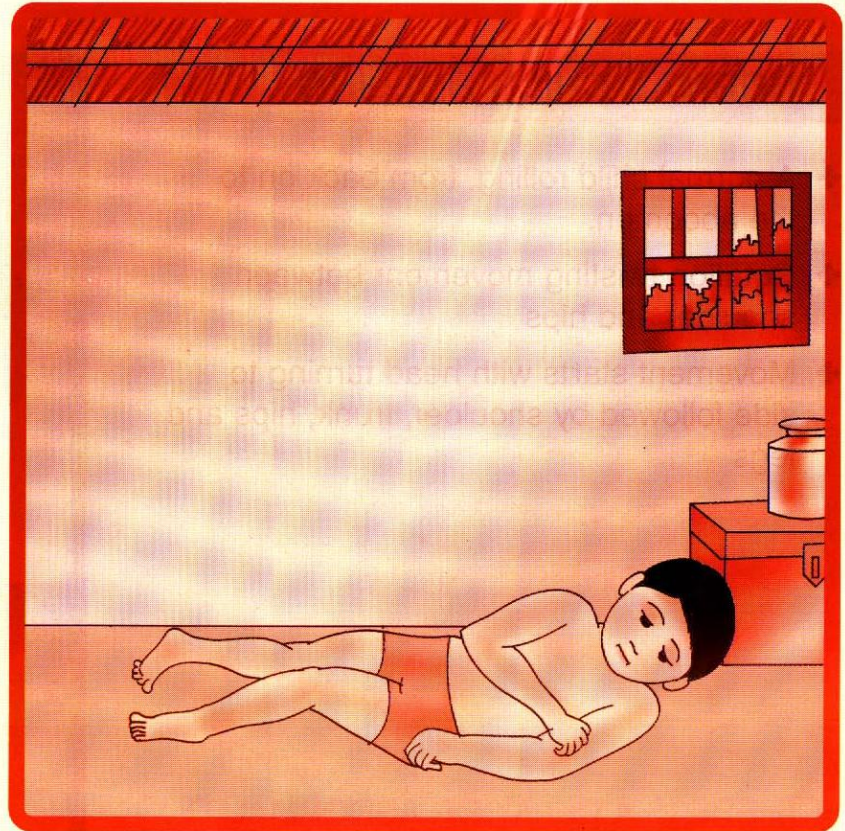
- ❖ A normal child rolling, from back on to the abdomen.
- ❖ Rotation twisting movement between shoulder and hips
- ❖ Movement starts with head turning to side followed by shoulder, trunk, hips and legs

IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP.



Abnormal Position (Stiff child)

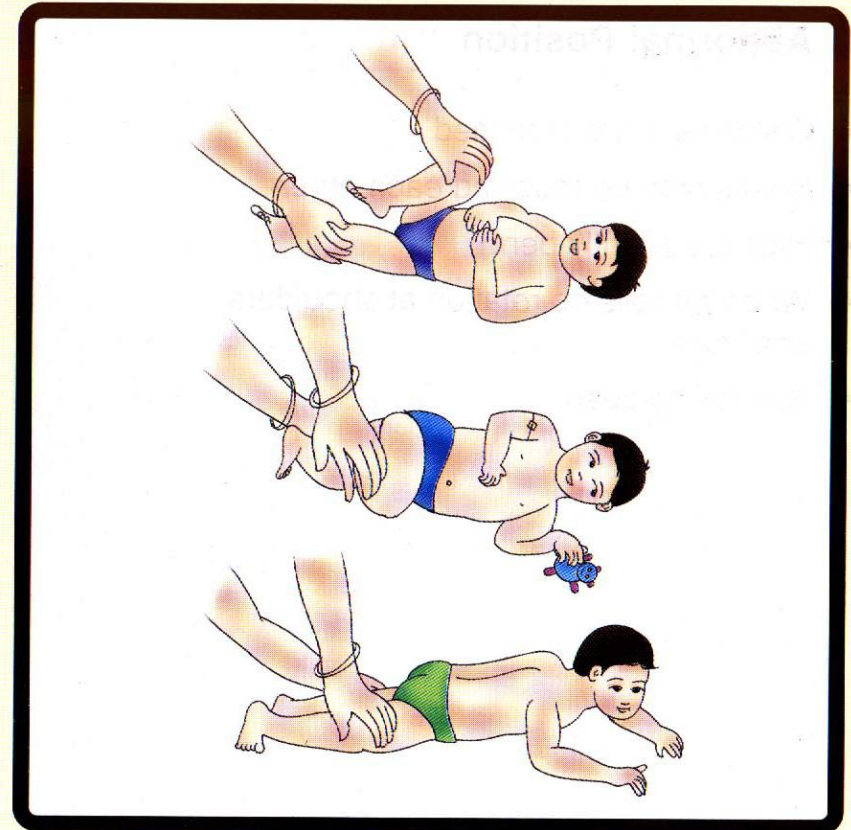
- ❖ Child's legs are extended
- ❖ Knees may be touching each other
- ❖ Hips are slightly bent
- ❖ When he rolls no rotation at shoulders and trunk
- ❖ Stiff rolling seen



Correction

To roll the child on the left side

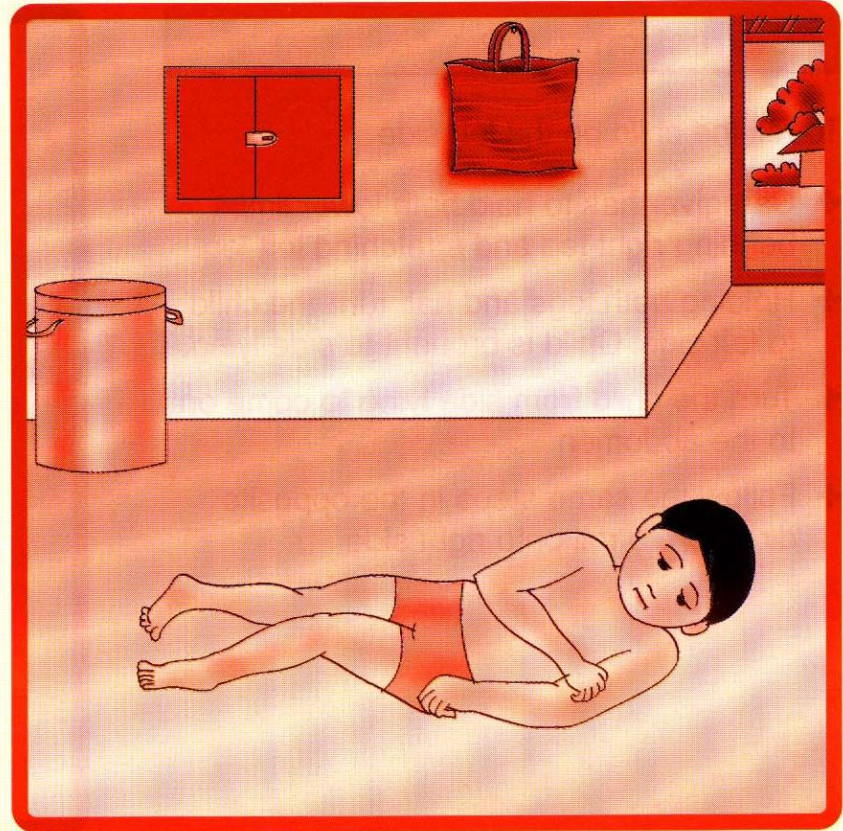
- ❖ Caregiver has to hold both lower limbs bending right leg and stretching left leg.
- ❖ Holding both legs and half turn the child to left side. Child is brought to side lying.
- ❖ Turn the child from side lying to come on to the abdomen
- ❖ Follow the same steps in the opposite direction to roll onto right side



Use activities for relaxation

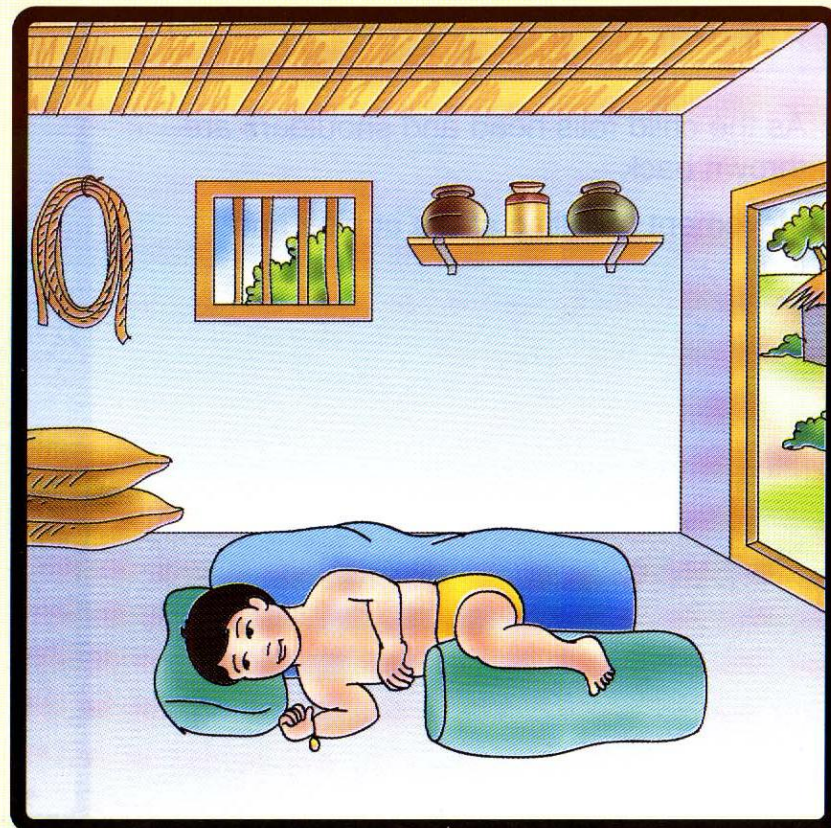
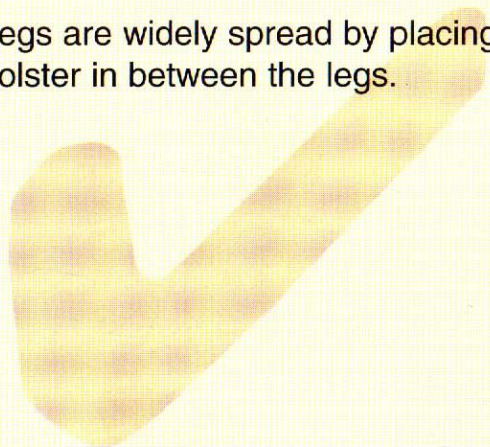
Abnormal Position (Stiff child)

- ❖ Child's legs are extended
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- ❖ Hips are slightly bent
- ❖ When he rolls no rotation at shoulders and trunk
- ❖ Stiff rolling seen



Correction

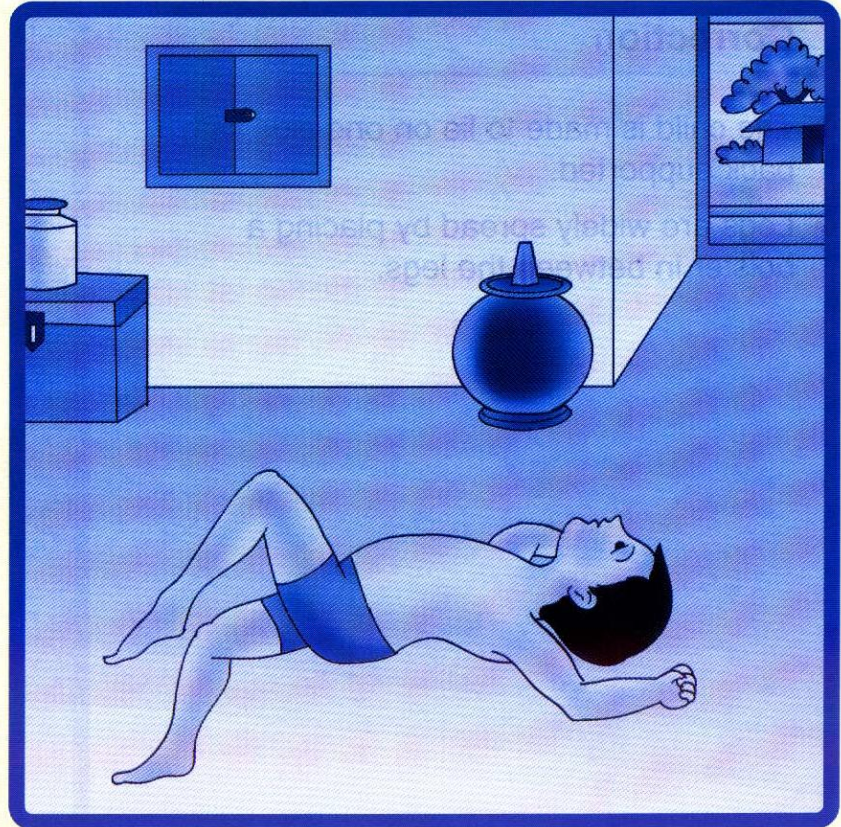
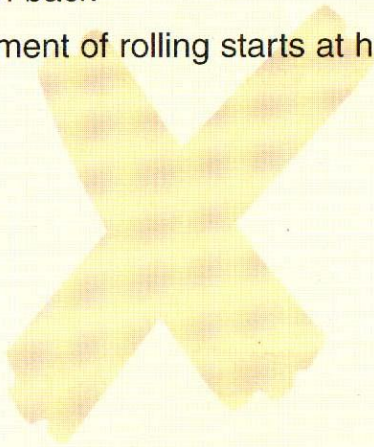
- ❖ The child is made to lie on one side with back supported.
- ❖ Legs are widely spread by placing a bolster in between the legs.



Use activities for relaxation

Abnormal Position (Floppy)

- ❖ As the child rolls head and shoulders are thrown back
- ❖ Movement of rolling starts at hips and legs



Correction

- ❖ The child is made to lie on the back with legs raised straight at hip and supported by the caregiver.
- ❖ The child is made to turn to one side with hip and knee bent and supported.
- ❖ The child is made to roll on to his tummy from side lying.
- ❖ Head is raised and weight is borne on elbows.

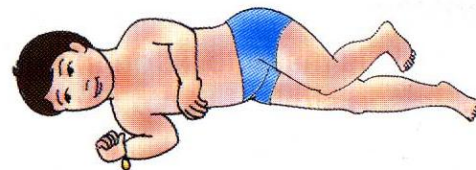


Use activities to build up tone

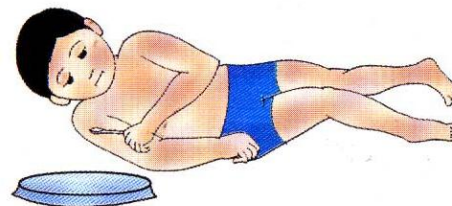
ROLLING

Activities for Stimulation

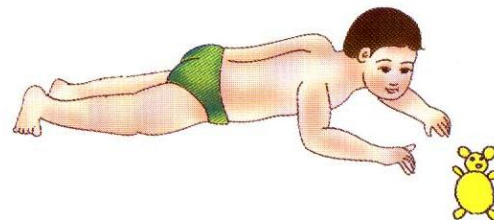
Visual Stimulation : Tie a beaded band of bright colors or black and white to the wrist on the side on which the child is lying or is to turn. Encourage the child to reach the beads with the other hand thereby guiding him to roll over.



Auditory Stimulation : Place a plate on the floor beside the child. Place a spoon in the hand, which is free, and ask the child to strike the plate with the spoon. In the process of this activity, the child should be guided to roll over.



Tactile Stimulation : Place a teddy bear or soft toy on the floor and encourage the child to reach it with hand that is free. Similarly place the ball or a toy in different directions to enable the child to reach for it, which helps in rolling over.



SITTING

NORMAL CHILD SITTING

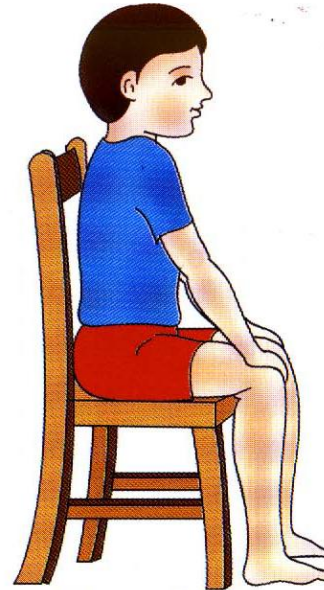
SITTING ON THE CHAIR

- ❖ The back and head are vertically straight
- ❖ Hips and knees are bent (as shown in the figure)
- ❖ Feet are placed flat on the floor

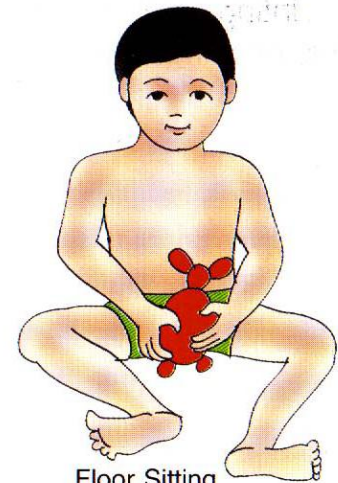
FLOOR SITTING

- ❖ The back and head are kept straight
- ❖ Hips and knees bent (as shown in the figure)
- ❖ The outer side of the thigh touching the floor

**IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP.**



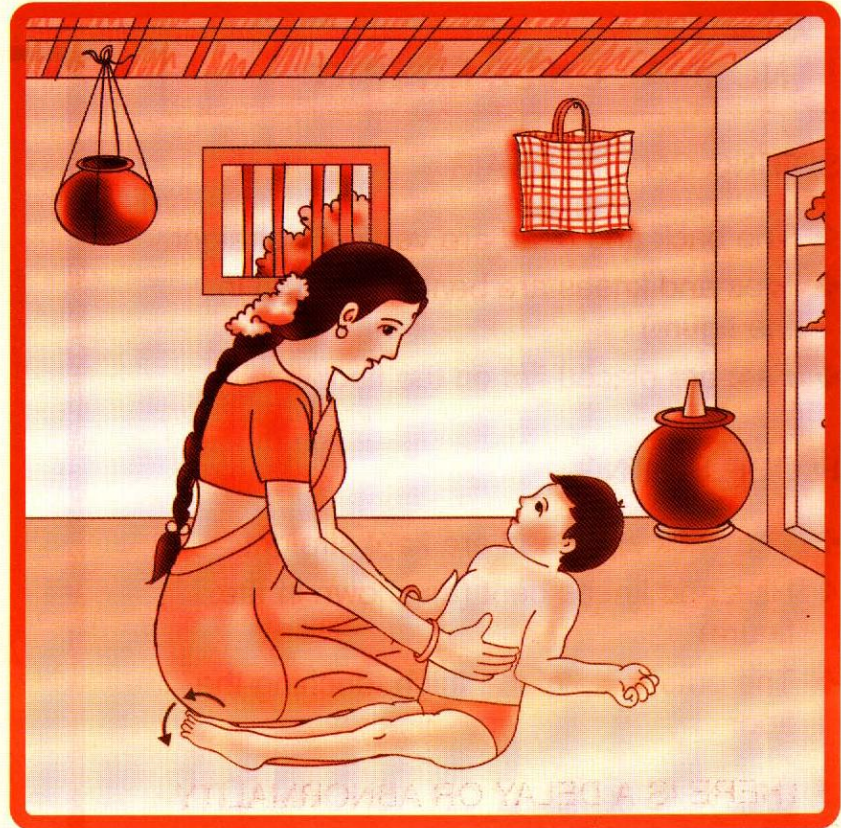
Sitting on the chair



Floor Sitting

Abnormal Position (Stiff child)

- ❖ Child's head and shoulder are thrown back
- ❖ Back is arched
- ❖ Presses the buttocks down
- ❖ Straightening at hip, knee and ankle.
- ❖ Toes pointing down



Correction

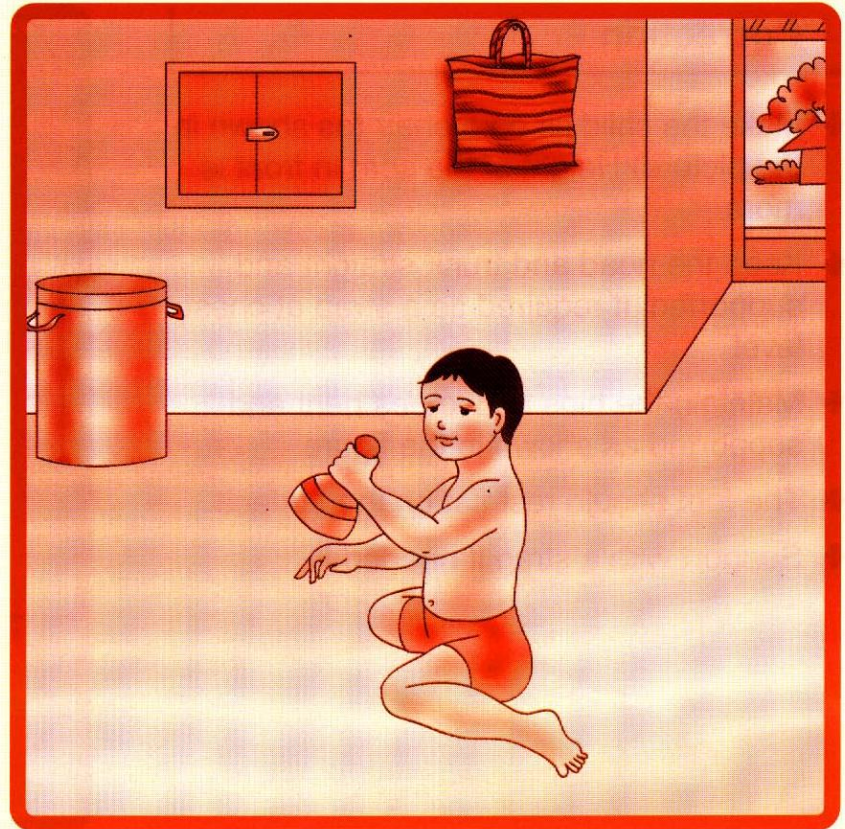
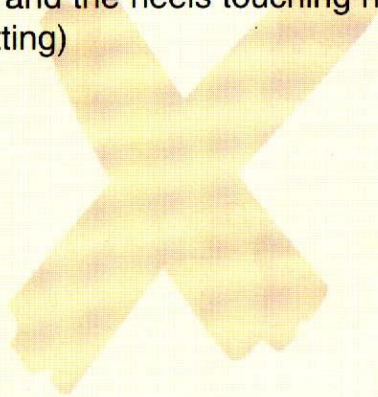
- ❖ Make the child sit on a chair (as shown in the picture) Height of the seat in front is more
- ❖ Keep the head and trunk straight and supported. If required tie a strap at chest level
- ❖ Maintain the hips and knees bent and supported as shown in the figure
- ❖ The feet should rest flat on the surface
- ❖ Support with a strap if needed



Use activities for relaxation

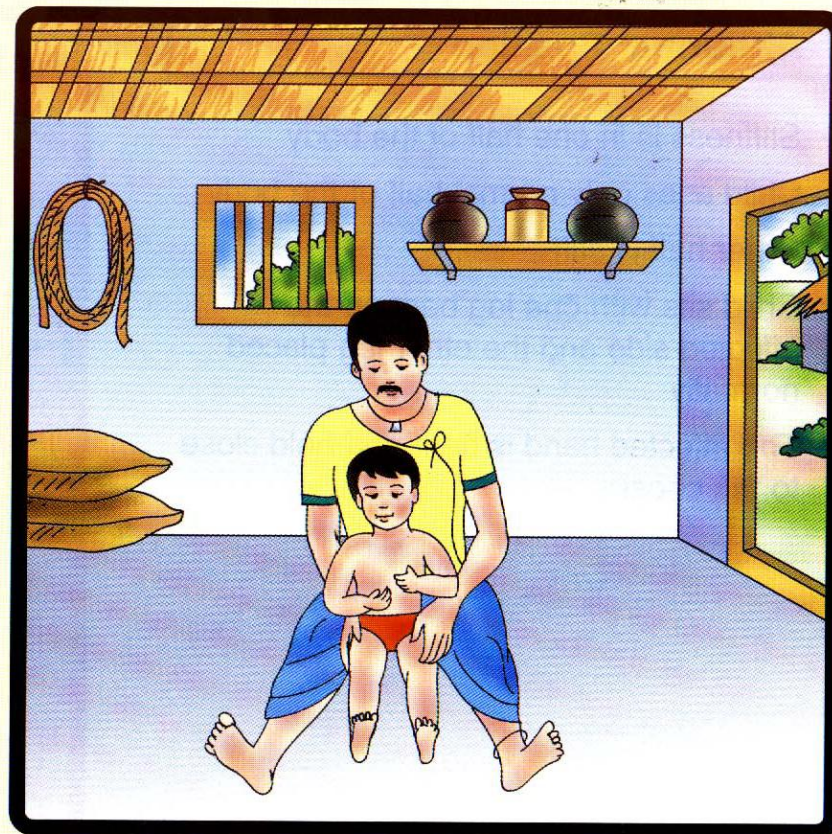
Abnormal Position(Stiff child)

- ❖ Stiffness more in lower limbs
- ❖ The child sits with legs folded under his thigh and the heels touching his buttock (w sitting)



Correction

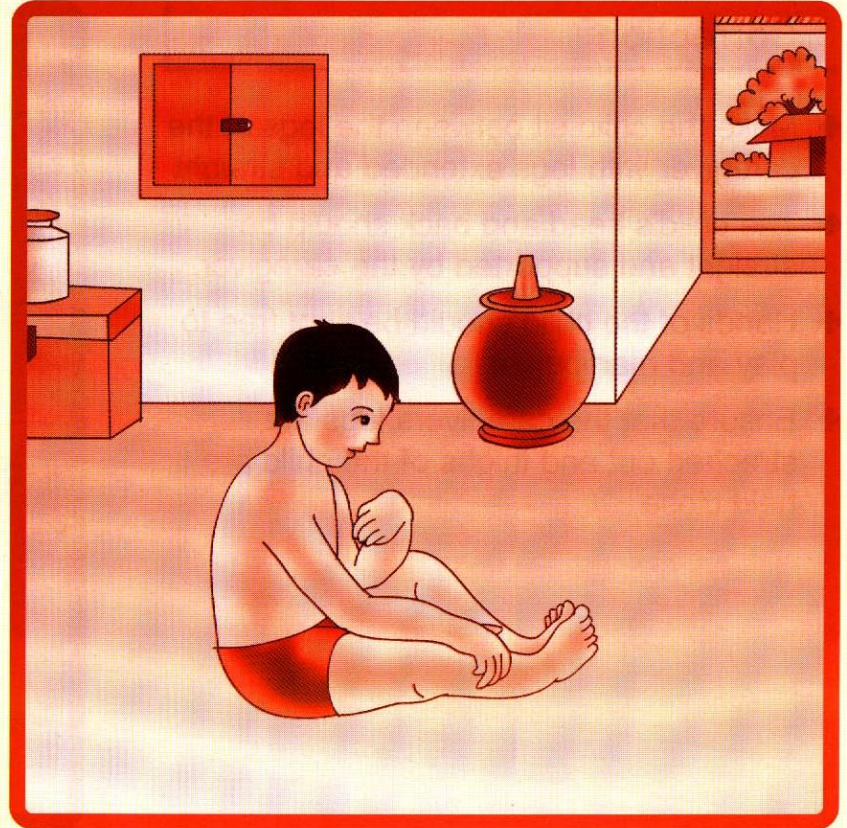
- ❖ Make the child sit between the legs of the caregiver with legs extended and straight
- ❖ The child's head and back should be straight and supported by the caregiver.
- ❖ Hands of the child should be kept free to play and manipulate
- ❖ Ensure that the caregivers legs are stretched out and thighs of the child are held close



Use activities for relaxation

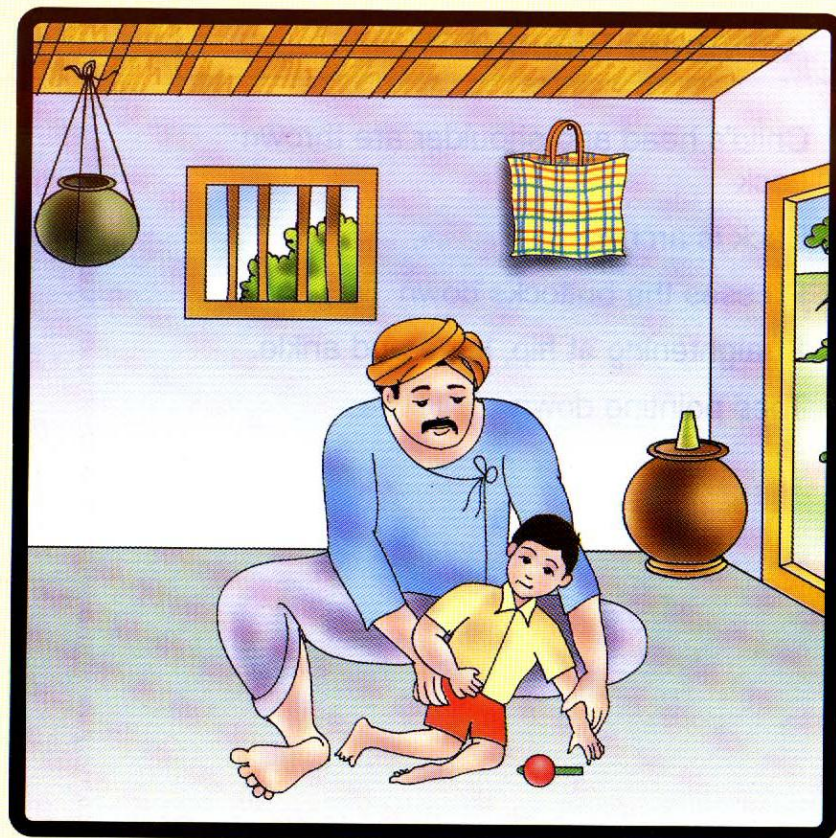
Abnormal Position (Stiff child)

- ❖ Stiffness is in one half of the body
- ❖ Child uses only normal half of the body
- ❖ Other half is stiff
- ❖ Child sits with one leg bent on the affected side and the other leg placed normally
- ❖ The affected hand is bent and held close to the chest



Correction

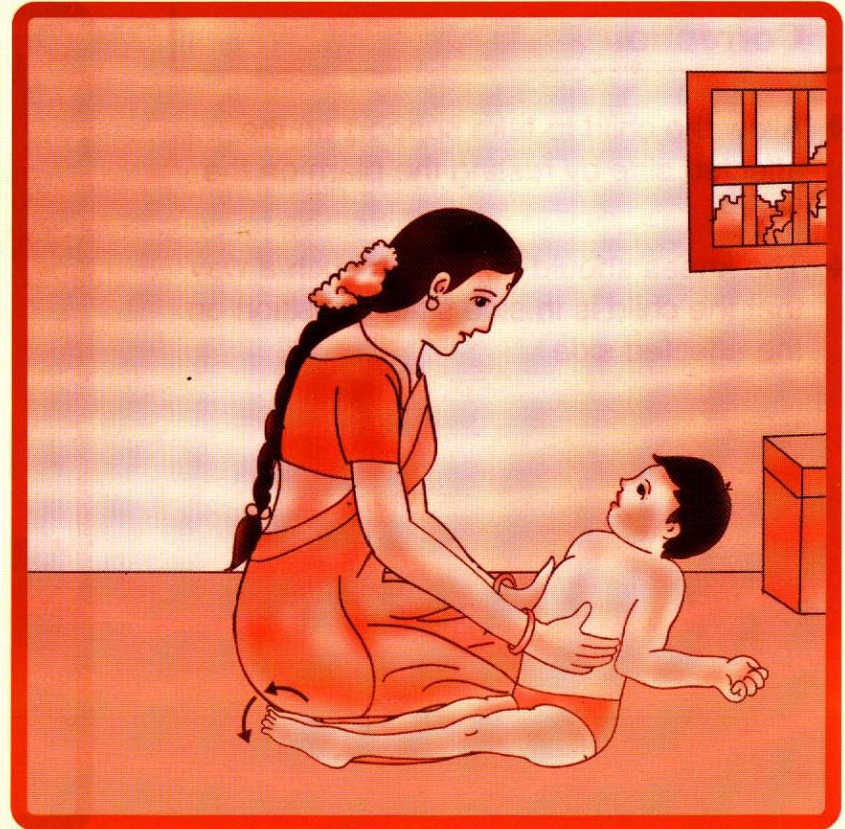
- ❖ Allow the child to take support on the affected side by resting the palm on the floor.
- ❖ The knees should be bent in such a way that the child is in side sitting position on the affected side



Use activities for relaxation

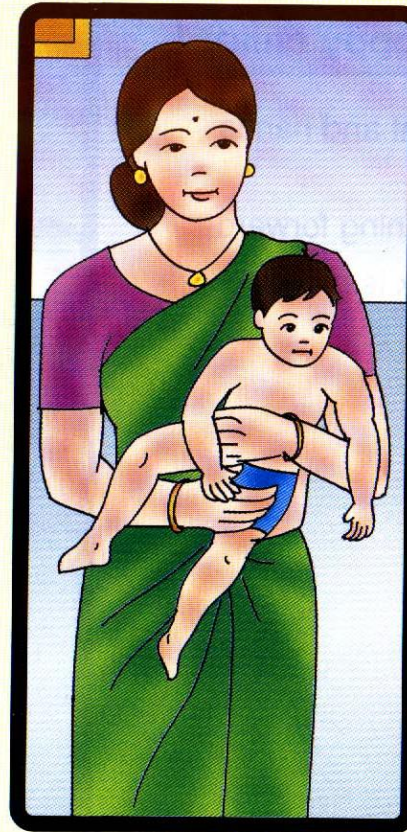
Abnormal Position (Stiff child)

- ❖ Child's head and shoulder are thrown back
- ❖ Back is arched
- ❖ Presses the buttocks down
- ❖ Straightening at hip, knee and ankle.
- ❖ Toes pointing down

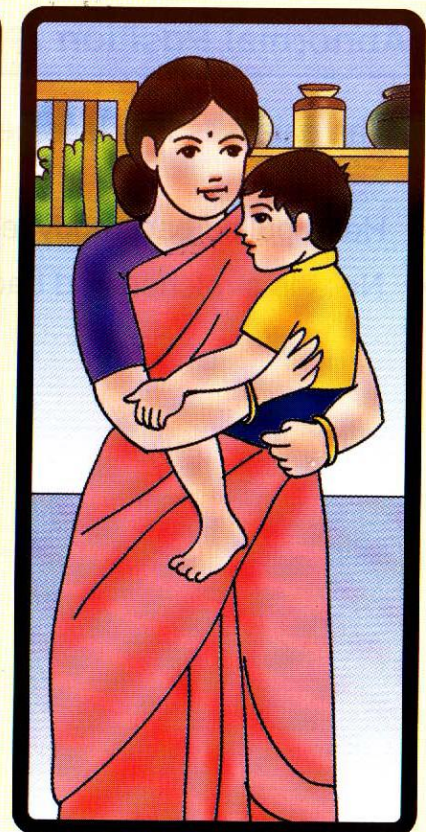


Correction

- ❖ The child should be lifted with his head facing forwards, chest supported, legs and arms widely separated by caregiver's hands. (fig-1)
- ❖ The child should be lifted at the mother's waist with trunk supported by mother's arms, child's legs held widely separated. (fig-2)
- ❖ If left side is affected caregiver should carry the child on her/his left side and vice versa (fig-2)



(fig-1)

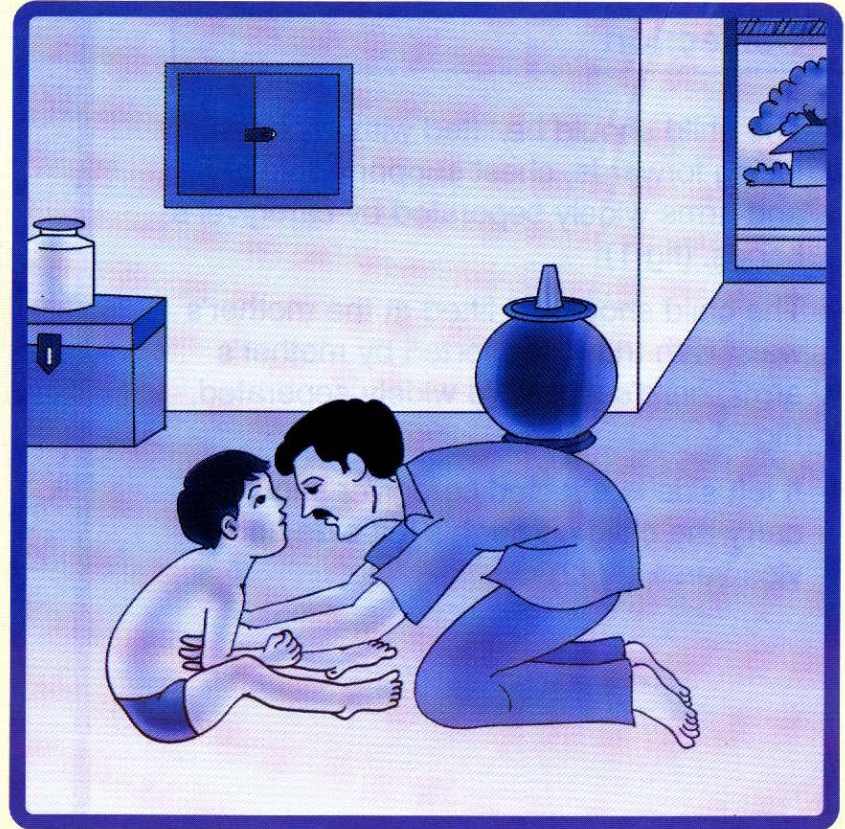
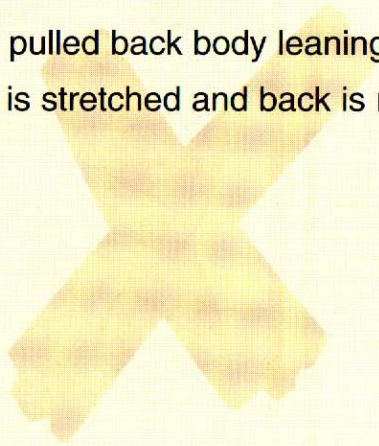


(fig-2)

Use activities for relaxation

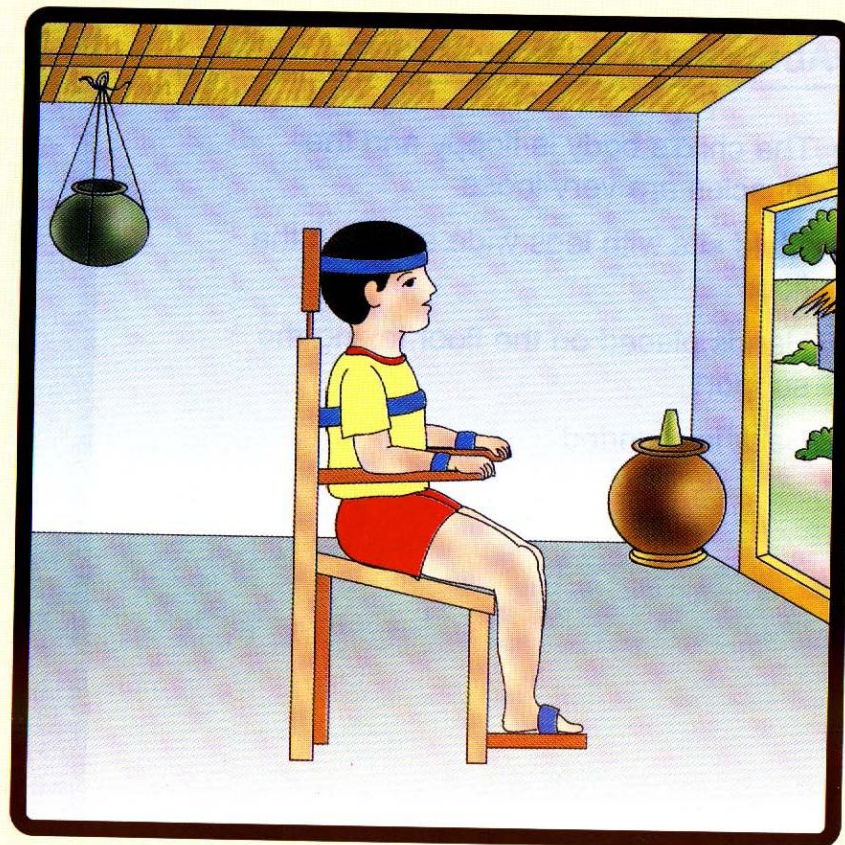
Abnormal Position (Floppy child)

- ❖ The child sits with legs bent and hands folded
- ❖ Head pulled back body leaning forward
- ❖ Neck is stretched and back is rounded



Correction

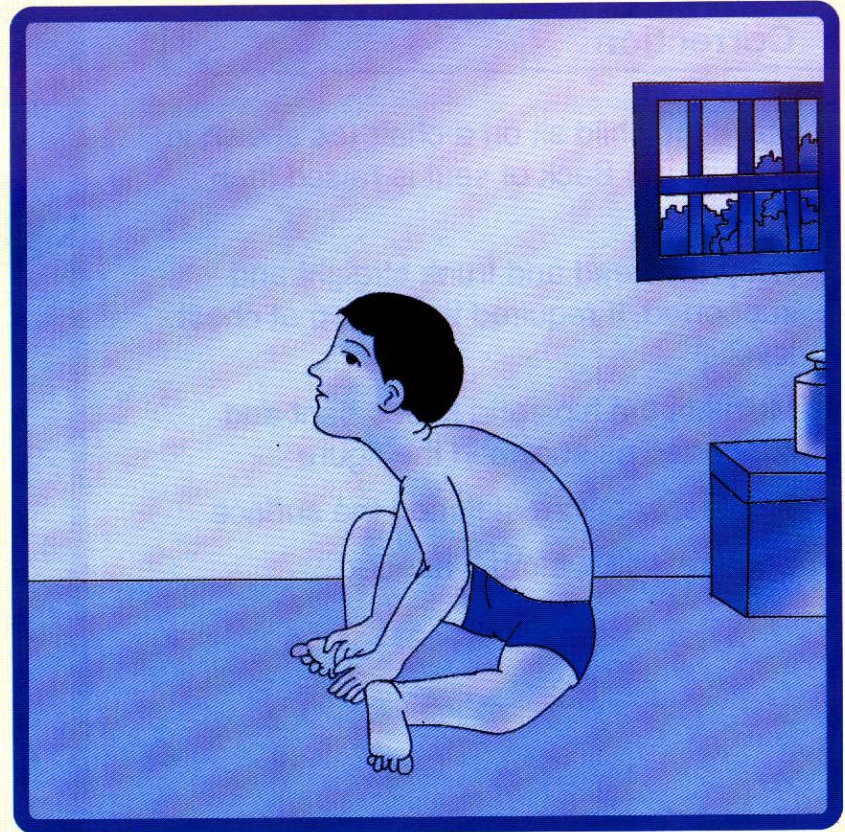
- ❖ Make the child sit on a chair (as shown in the picture) Back of seat is raised than front
- ❖ Keep the head and trunk straight and supported. If required tie a strap at chest level
- ❖ Maintain the hips and knees bent and supported as shown in the figure
- ❖ The feet should rest flat on the surface
- ❖ Support with a strap if needed



Use activities to build up tone

Abnormal Position (Floppy child)

- ❖ The child's body is floppy and the muscles are very loose
- ❖ Child sits with legs wide apart on the floor
- ❖ Hands placed on the floor taking the support
- ❖ Back is rounded



Correction

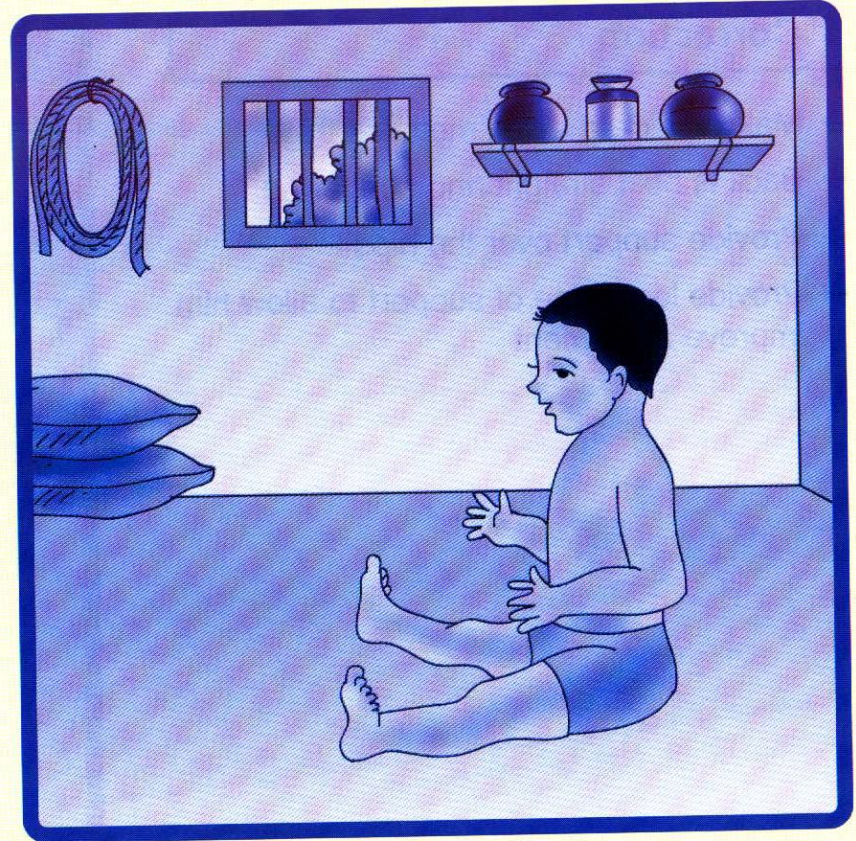
- ❖ Make the child sit on mother's thigh
- ❖ Back is held straight and supported
- ❖ Provide support over the hips
- ❖ Provide less base of support to allow him improve movement



Use activities to build up tone

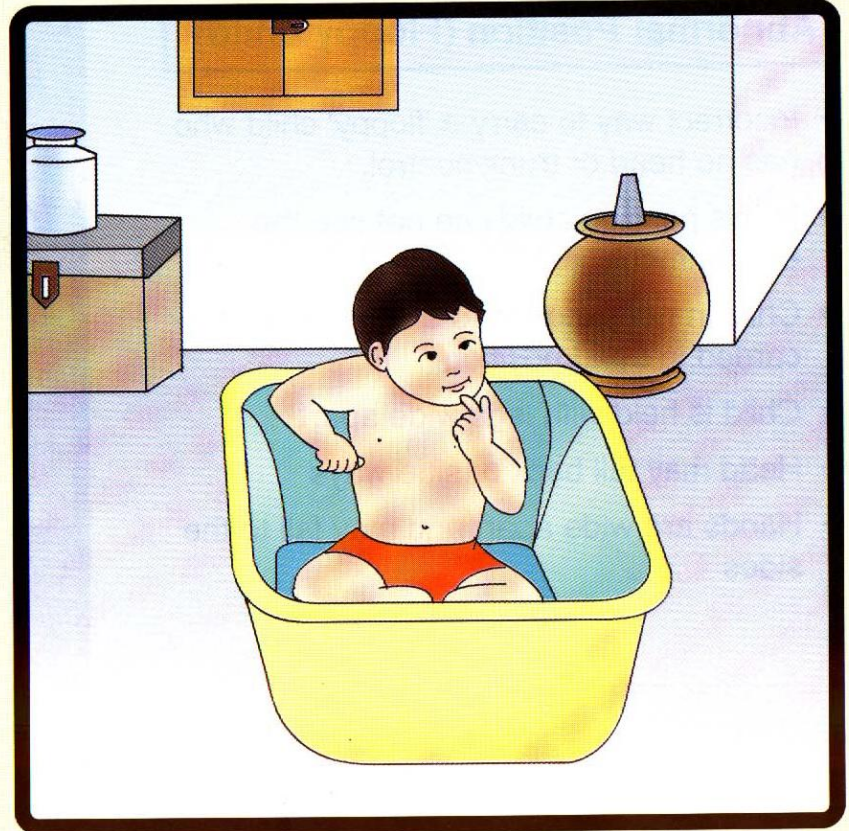
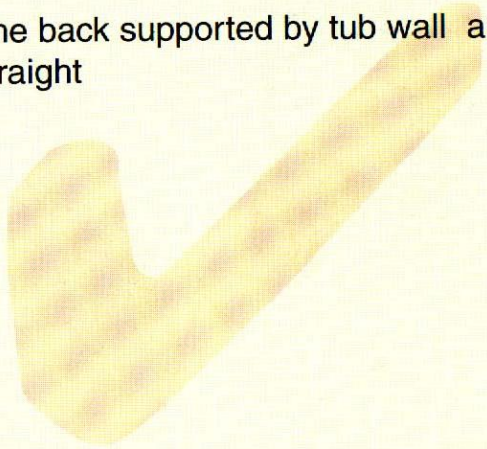
Abnormal Position (Floppy child)

- ❖ Child is sitting with outstretched legs and hands bent and held out.
- ❖ Child's upper limbs are retracted and does not bring the hands forward for play.
- ❖ Child can not move out of the position and play.
- ❖ Child is scared of falling



Correction

- ❖ The Child is made to sit in the tub with knees bent and held close.
- ❖ The back supported by tub wall and held straight



Use activities to build up tone

Abnormal Position (Floppy child)

- ❖ Incorrect way to carry a 'floppy' child who has no head or trunk control.
- ❖ In this position child can not see the environment.
- ❖ Child is not exposed to extension as it is carried in bend position
- ❖ Child is held with legs wide apart
- ❖ Head may fall back or side ways
- ❖ Hands are wide apart and may fall to the sides



Illustration of a floppy child

Correction

The correct way to carry a 'floppy' child

- ❖ His legs are bent and held together
- ❖ Firm support is given at the hips
- ❖ This helps the child to extend his head and back
- ❖ Back may be supported against mother's body



Use activities to build up tone

SITTING

Activities for Stimulation

Visual Stimulation :

- ❖ Hang a bright colored toy to a string placed in front of the child, this encourages focussing or fixing on objects. Move the toy from side to side and encourage the child to trace the object.
- ❖ Place attractive toys on the table in front of the child. Encourage the child to reach for the toys, grasp them and manipulate.
- ❖ While covering the child and moving around mother can show different objects, pictures, toys, etc.



Auditory Stimulation :

- ❖ Hang a string of noisemakers in front of the child. Encourage the child to grasp, pull or hit them where by they produce sounds.
- ❖ Place rattles or musical instruments in front of the child so that the child reaches holds and bangs them and enjoys the sounds produced.
- ❖ Provide a plate and a spoon and place them in front of the child. When the child plays with the spoon hitting it against the plate produces a sound which will stimulate the child through play.



Tactile Stimulation :

- ❖ Hang toys made of different textures such as cotton and coir in front of the child. When the child reaches for them it gives him a sensation of touching different surfaces.
- ❖ Place soft toys of different sizes on the floor in front of the child. When the child reaches for the toys, it helps him experience the feel of it. Large soft toys will also help in tactile stimulation as the child would enjoy cuddling them.

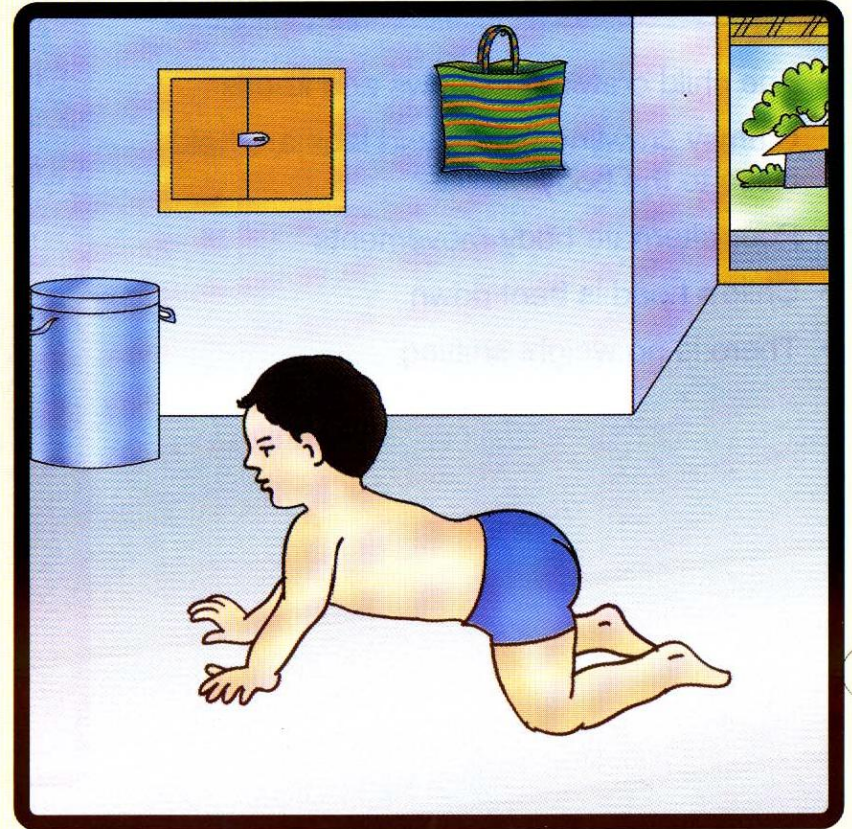


CRAWLING

NORMAL CHILD CRAWLING

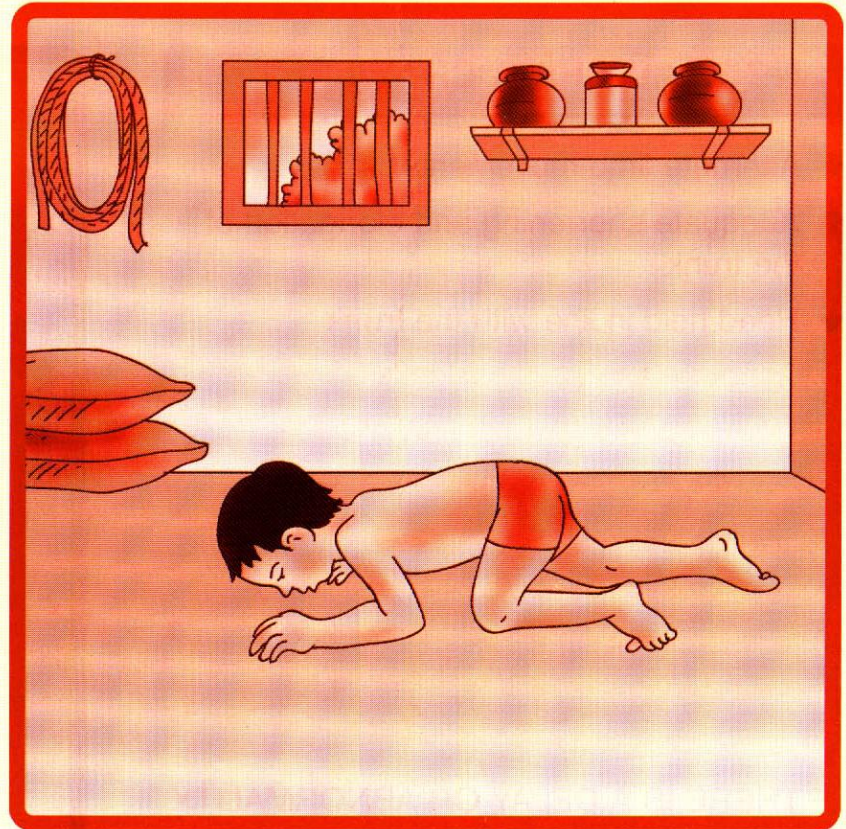
- ❖ Alternate limb movements
- ❖ Adequate shortening and elongation of the trunk
- ❖ Head held in line with the trunk

IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP



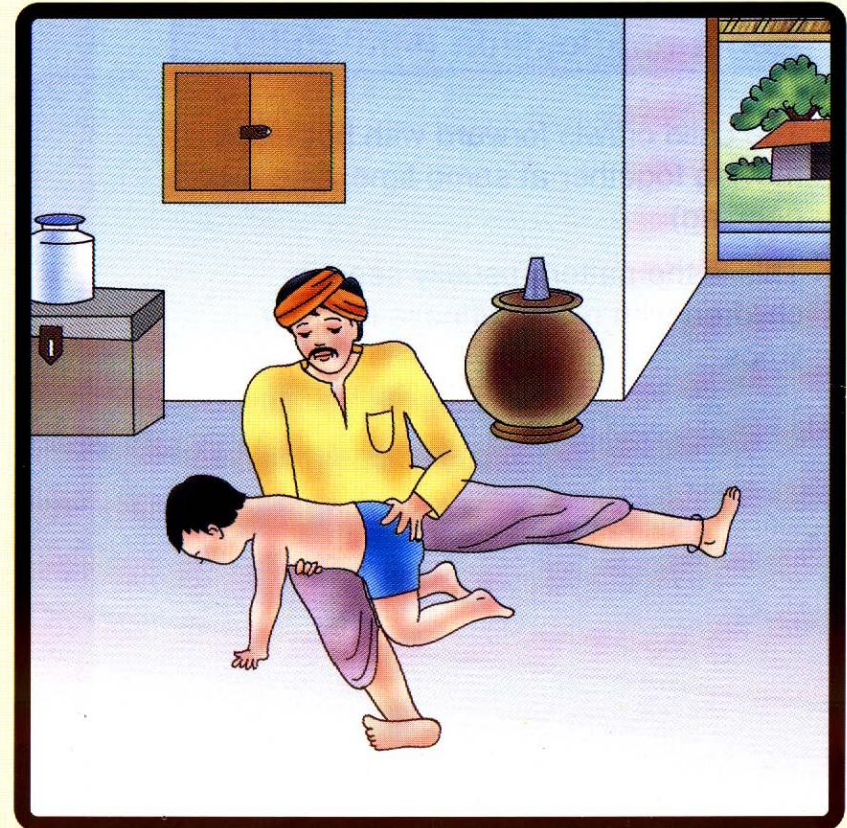
Abnormal Position (Stiff child)

- ❖ The child crawls on elbows and knees
- ❖ Clumsy crawling hands and legs are held close to the body
- ❖ Poor alternate body movements
- ❖ Child's head is bent down
- ❖ There is no weight shifting



Correction

- ❖ Put the child in Crawling Position (on all fours)
- ❖ Support the trunk against Caregiver's thigh
- ❖ Make the child take weight on the hands and knees
- ❖ Provide support over the hips
- ❖ Shift the weight forwards, backwards and side to side
- ❖ Encourage the child to crawl forward by shifting the weight
- ❖ Later child should bear weight alternatively and move forward

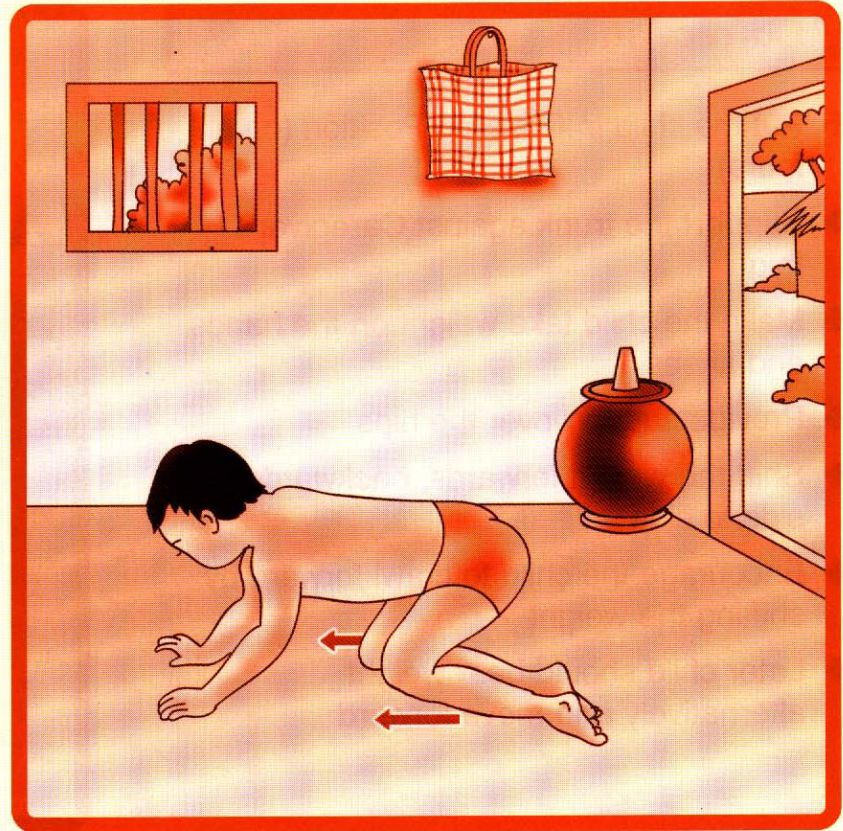
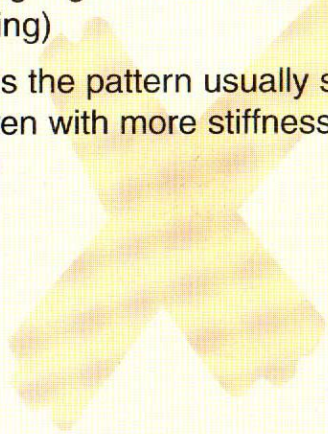


Use activities for relaxation

CRAWLING

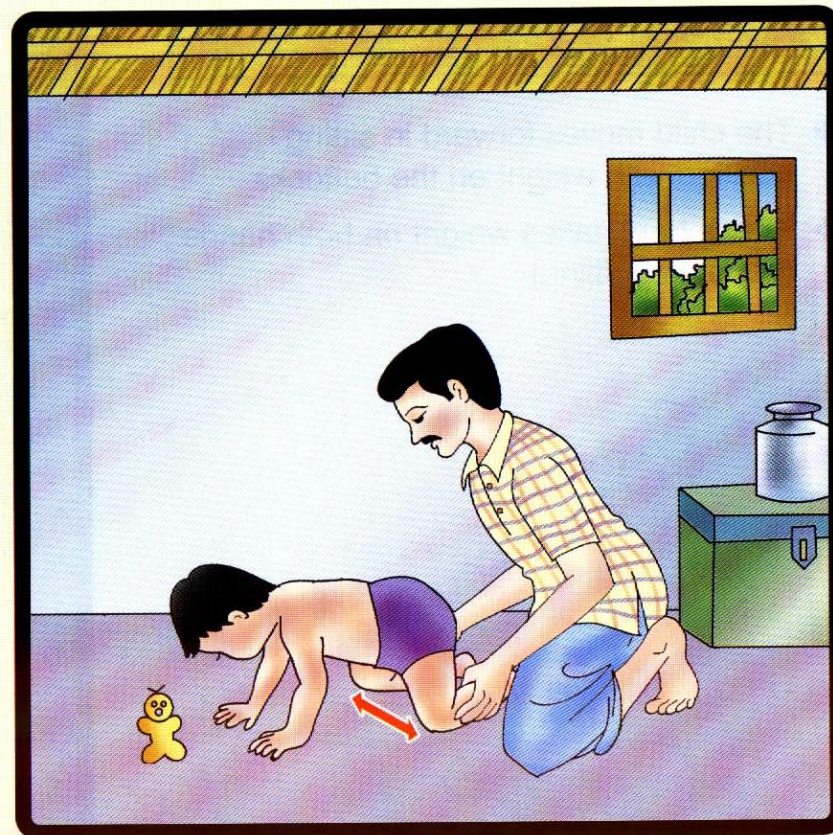
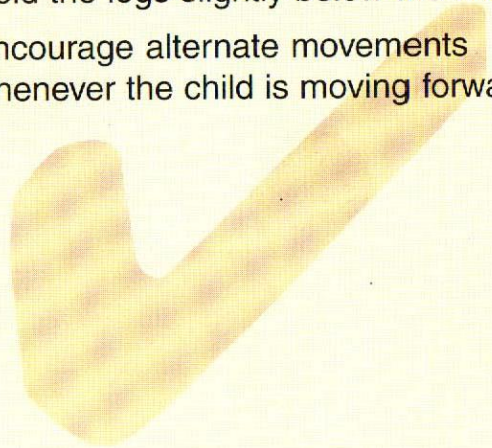
Abnormal Position (stiff child)

- ❖ The child crawls forward with both legs moving together at same time. (like rabbit hopping)
- ❖ This is the pattern usually seen in children with more stiffness in lower limbs



Correction

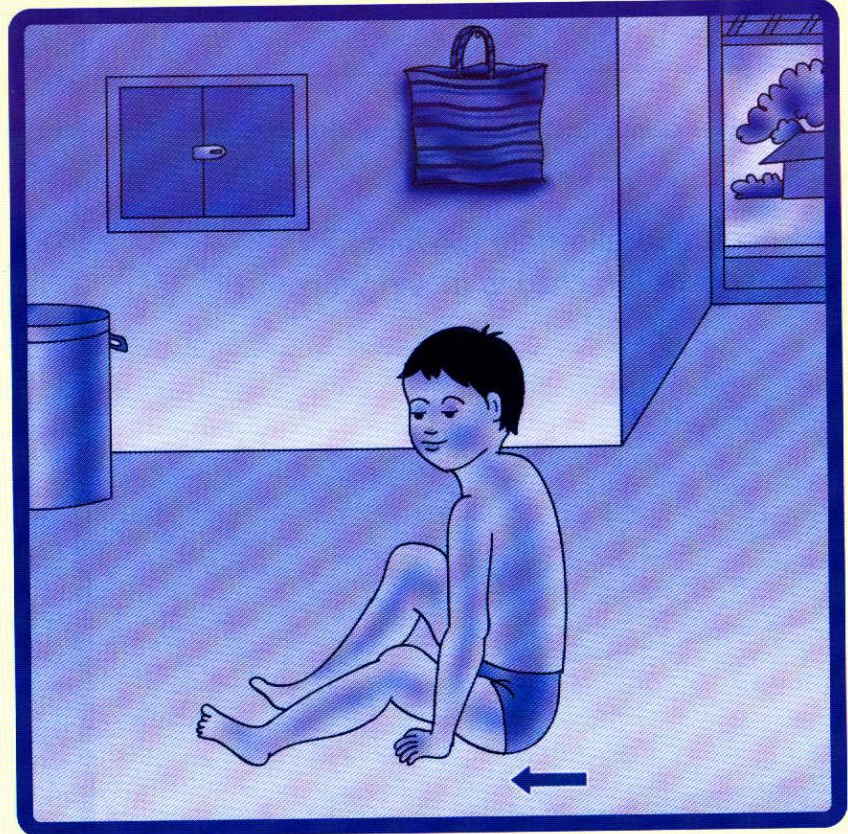
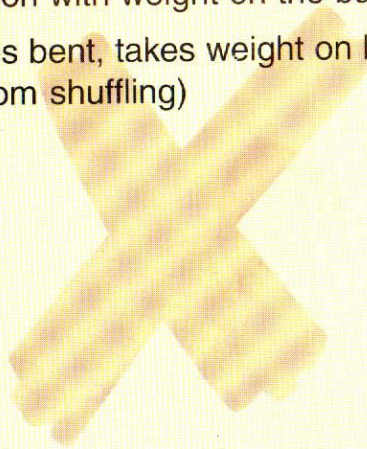
- ❖ Put the child in crawling position
- ❖ Hold the legs slightly below the knee
- ❖ Encourage alternate movements whenever the child is moving forward



Use activities for relaxation

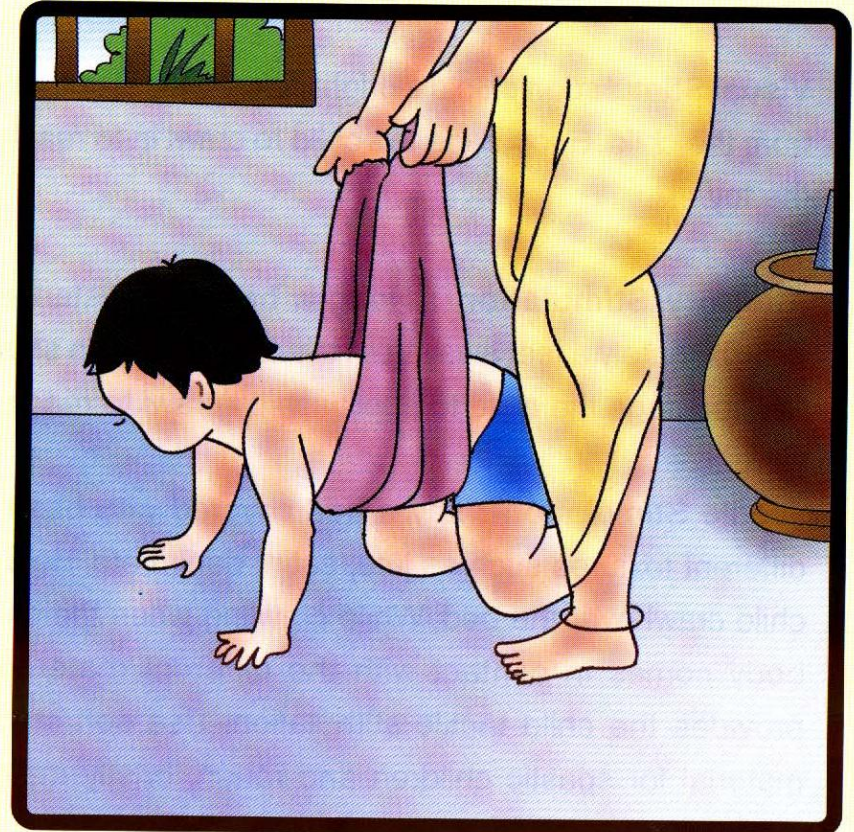
Abnormal Position (Floppy child)

- ❖ The child moves forward in sitting position with weight on the buttocks
- ❖ Knees bent, takes weight on both hands., (bottom shuffling)



Correction

- ❖ Put the child in crawling position
- ❖ Hold a towel wrapped around his waist as shown in the picture
- ❖ Shift the weight of the child forwards, backwards and side to side
- ❖ Encourage the child to go forward shifting the weight alternately

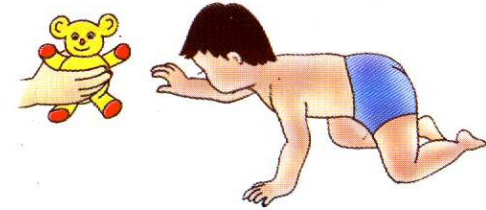


Use activities to build up tone

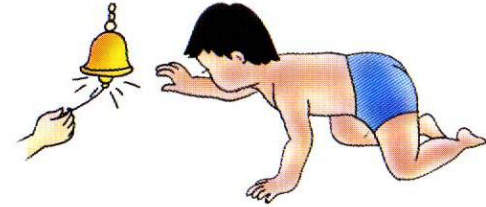
CRAWLING

Activities for Stimulation

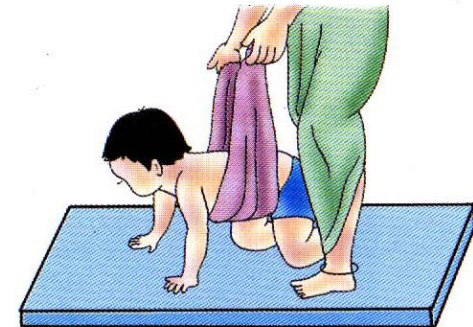
Visual Stimulation : Hold a bright colored toy slightly away from the child. Encourage the child to crawl in to reach for the toy.



Auditory Stimulation : Hang a bell at a distance of approximately a feet away from the child make the sounds to encourage the child to approach by crawl to reach it.



Tactile Stimulation : Lay a bed covered with bands of different textures such as jute, satin, denim etc. Help the child crawl over the bed. While crawling when the child's body comes in contact with the different materials it provides the child tactile stimulation. Use soft smooth material for spastic children and rough, bristly material for floppy children

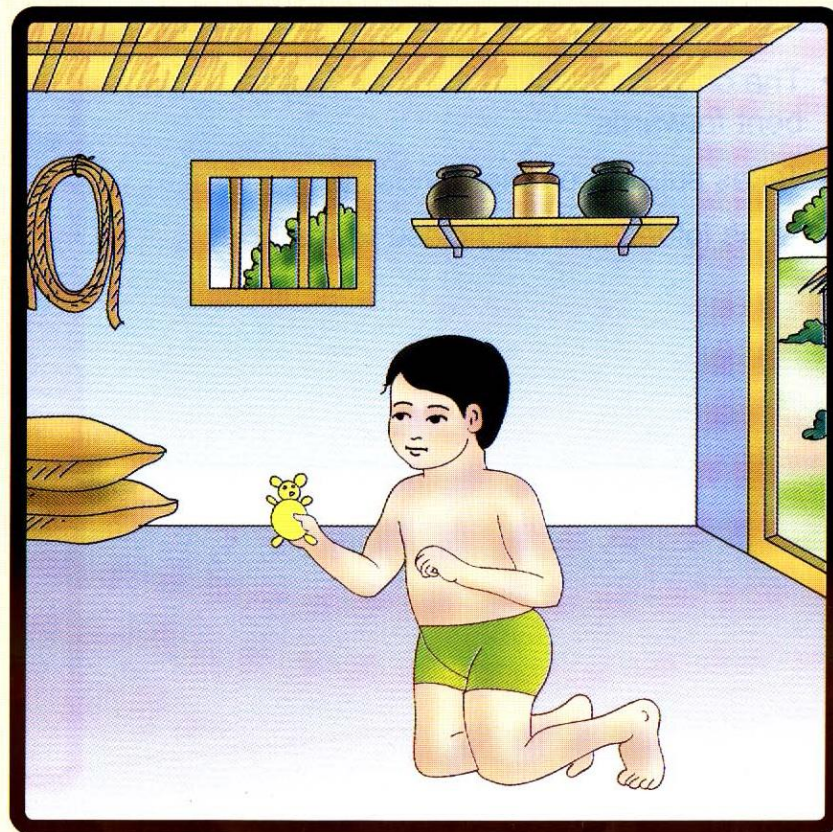


KNEELING

NORMAL CHILD KNEELING

- ❖ Head and trunk are in alignment (in straight line)
- ❖ Hip held straight without arching of the back
- ❖ Weight bearing is on both knees
- ❖ Uses both hands in play or for other activities

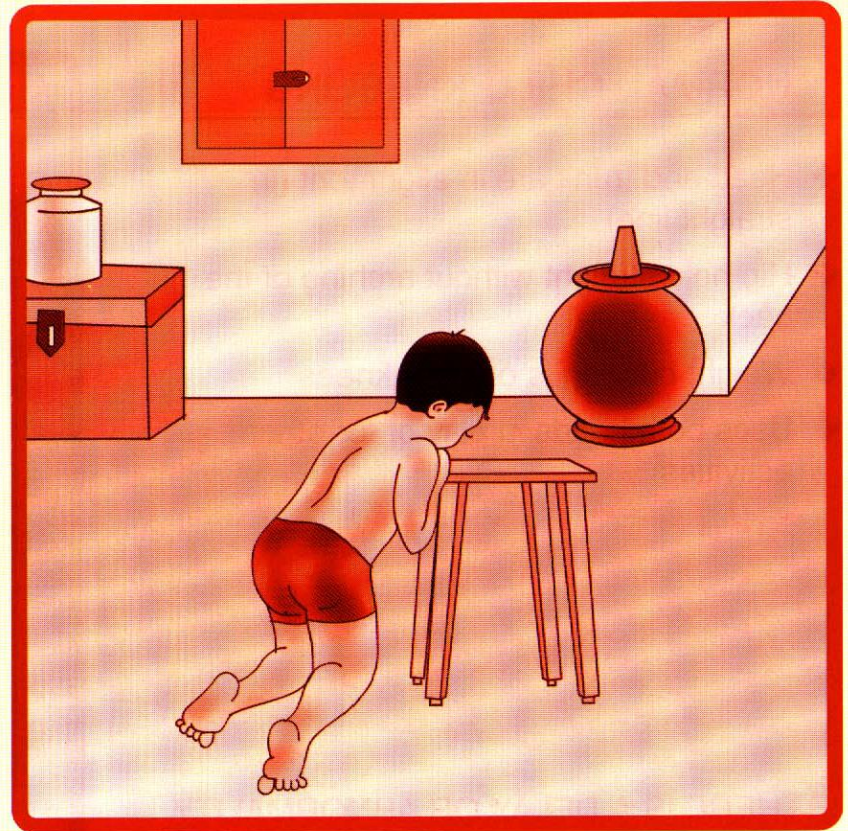
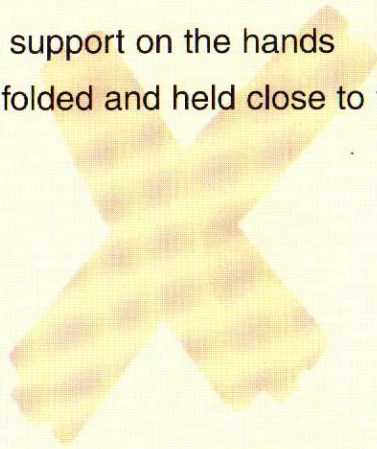
IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP



KNEELING

Abnormal Position (Stiff child)

- ❖ The child kneels with trunk and head bent forwards
- ❖ Takes support on the hands
- ❖ Arms folded and held close to the body.



Correction

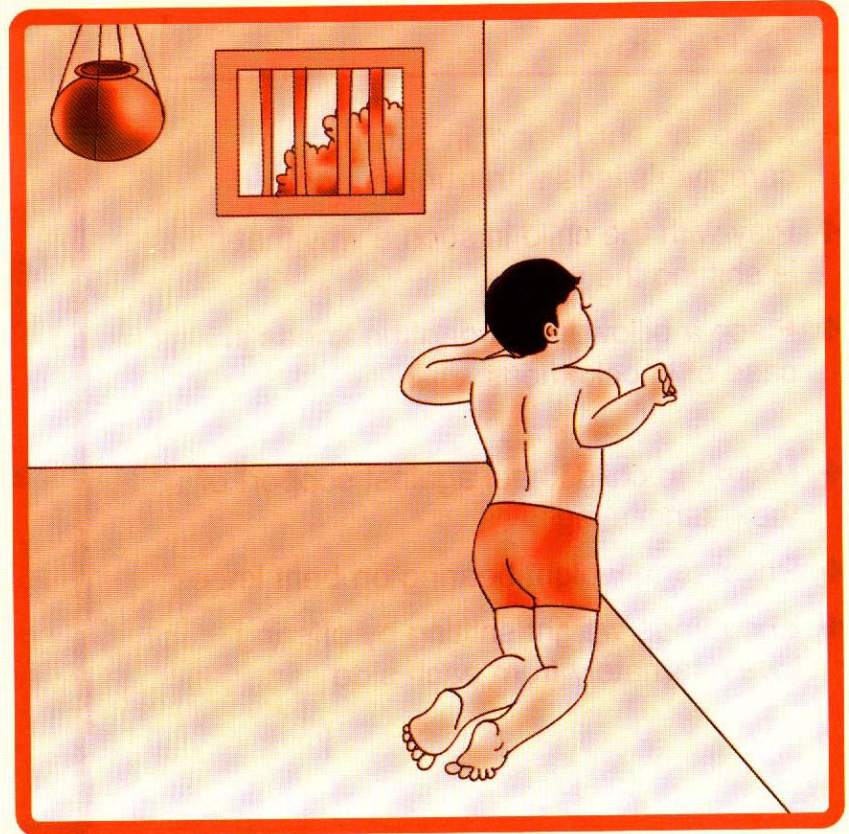
- ❖ Make the child kneel in between caregiver's legs with trunk supported
- ❖ Play with the child in such a way that he is shifting the weight
- ❖ Place a pillow inbetween the knees in case of knock knees.
- ❖ Make the child kneel against support of the mother's leg
- ❖ Encourage weight bearing on bent knees
- ❖ Encourage weight shifting by offering toys alternately from each side



Use activities for relaxation

Abnormal Position (Stiff child)

- ❖ The child kneels with hands held back
- ❖ Chest is pushed forward
- ❖ Body shows stiffness
- ❖ Child arches back instead of keeping hip straight



Correction

- ❖ Position the child in kneeling with front support (stool or bench)
- ❖ Support the hips by placing the caregiver's hand on both sides
- ❖ Extend the arms forward and encourage him to play



Use activities for relaxation

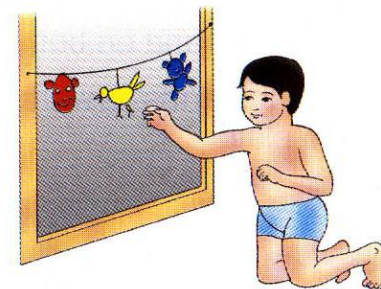
KNEELING

Activities for Stimulation

Visual Stimulation : To sustain the child in the kneeling position place a low table in front of him with some bright colored toys like cubes on the table.



Auditory Stimulation : Provide auditory stimulation to the child by placing a noise producing dangling toys on window grills or by tie string across the legs of high tables and hanging the noise makers to it. When the child is in crawling position shake the noise makers so that the child is encouraged to free his hands to grasp the noise producing toy at a higher level there by coming to kneeling position.



Tactile Stimulation : Make the child kneel and help him stay in that position by supporting him between your knees. Engage him in a play with toys so that he remains in the kneeling position for a while.



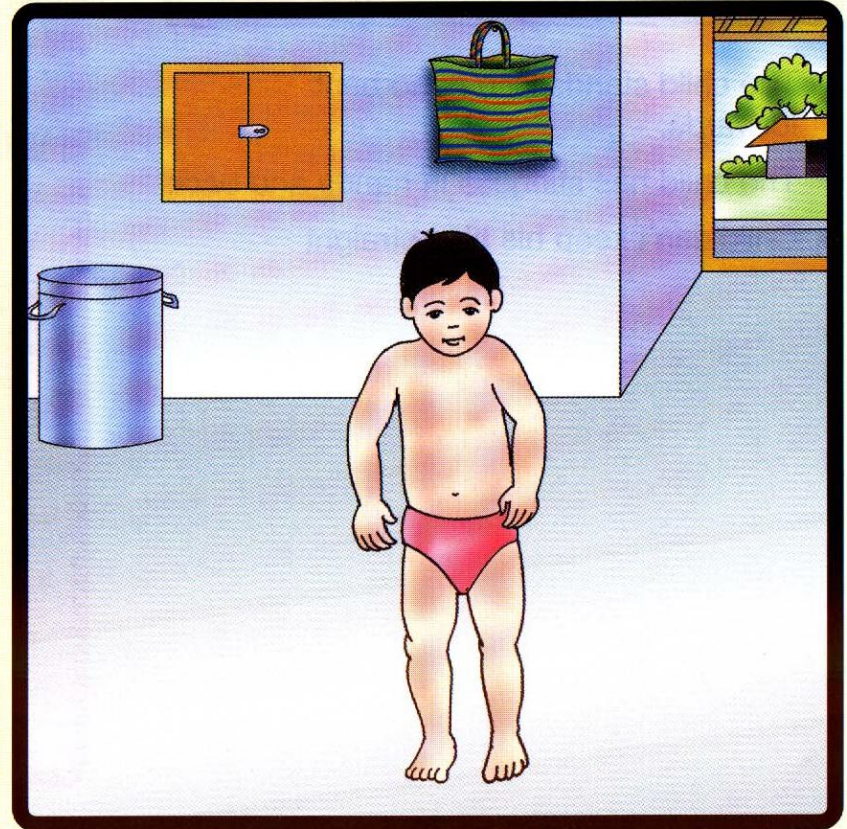
Note : All the activities should be such that the child is brought into kneeling position and bears weight on the bent knees.

STANDING

NORMAL CHILD STANDING

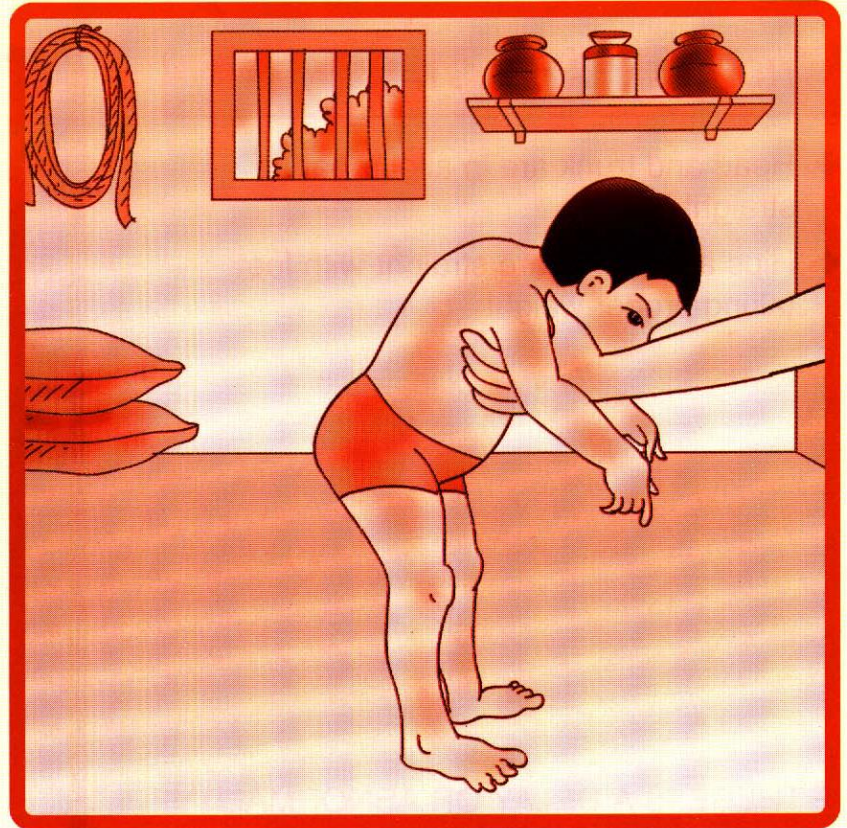
- ❖ Head and trunk are in alignment (in straight line)
- ❖ Hips and knees are straight with feet taking proper weight

IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP



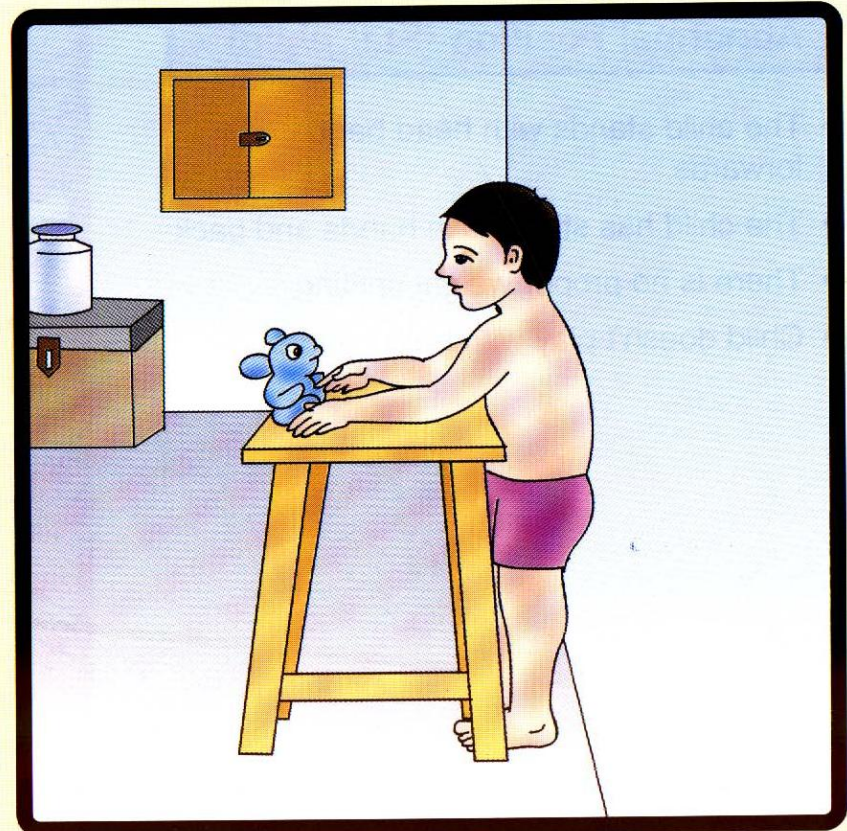
Abnormal Position (Stiff child)

- ❖ The child stands with head bent forwards.
- ❖ The child has stiffness in hands and back
- ❖ Child can't keep his hips straight



Correction

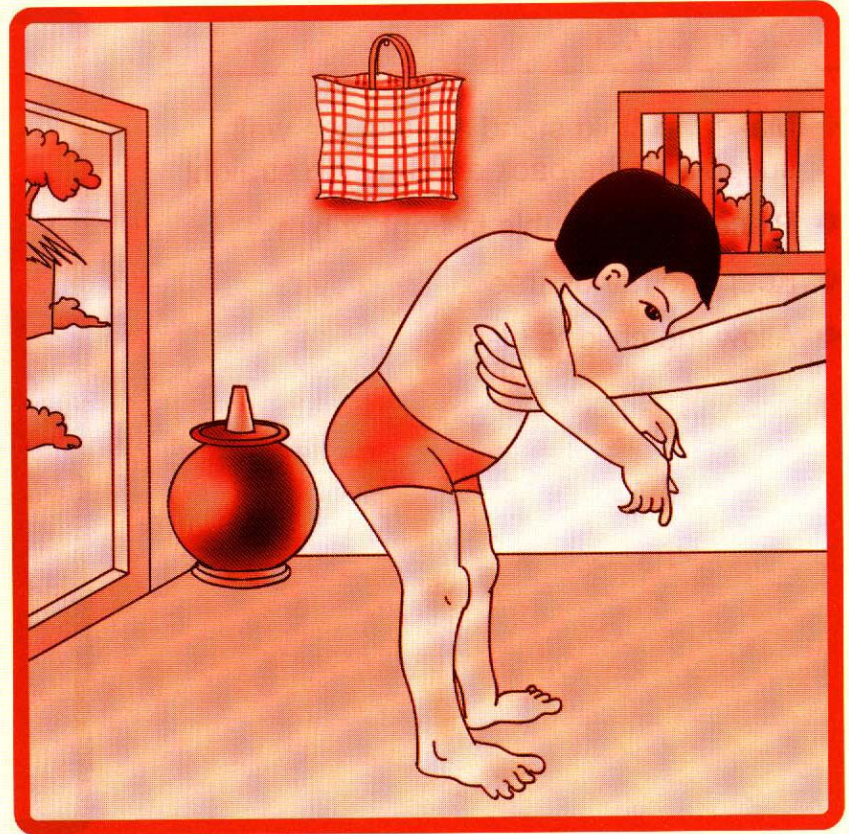
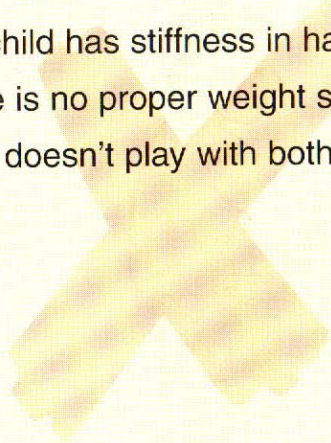
- ❖ Make the child stand against the wall supporting the back and holding straight
- ❖ Place a stool / table in front of him
- ❖ Keep the hands free
- ❖ Allow the child to play



Use activities for relaxation

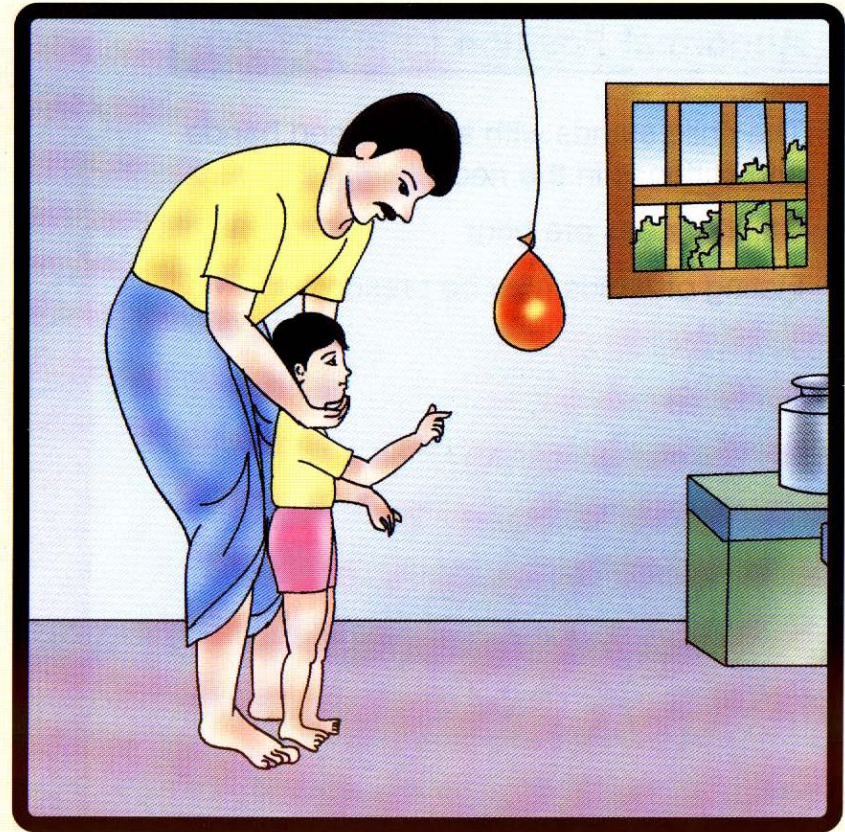
Abnormal Position (Stiff child)

- ❖ The child stands with head bent forwards.
- ❖ The child has stiffness in hands and back
- ❖ There is no proper weight shifting
- ❖ Child doesn't play with both hands



Correction

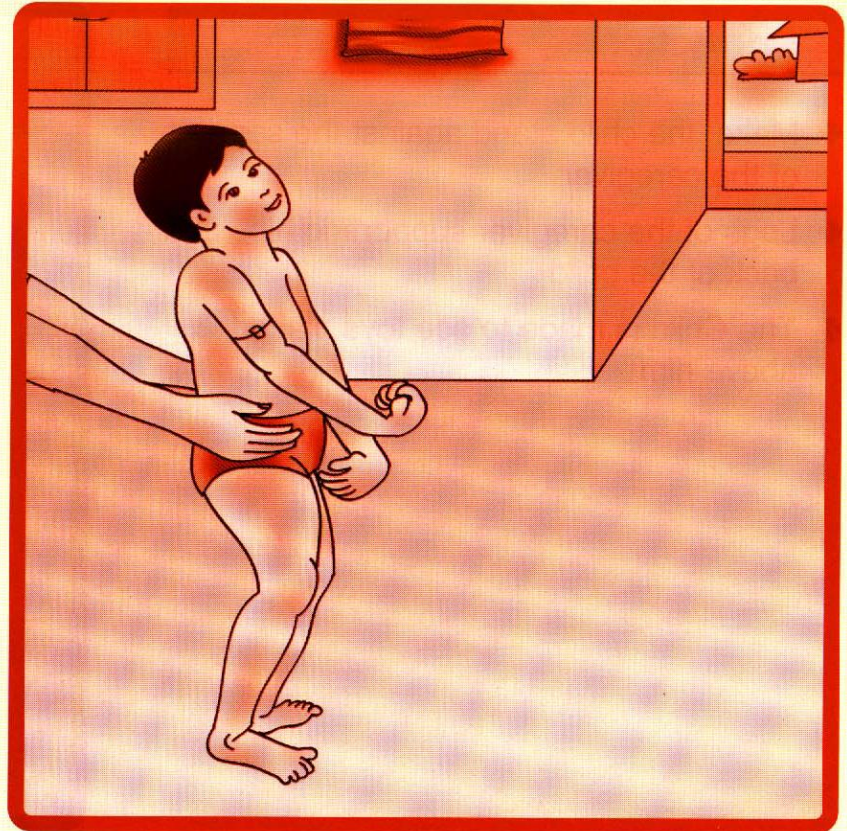
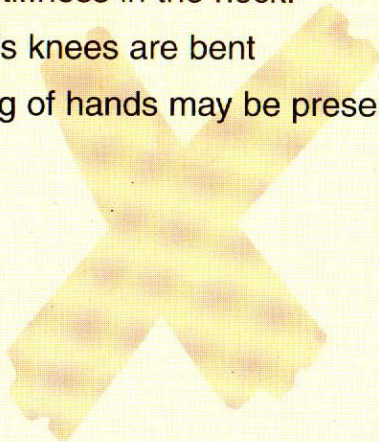
- ❖ Make the child stand against the support of the caregiver
- ❖ Legs of the caregiver supporting hips and back of the child
- ❖ The Child is made to see toys placed above him



Use activities for relaxation

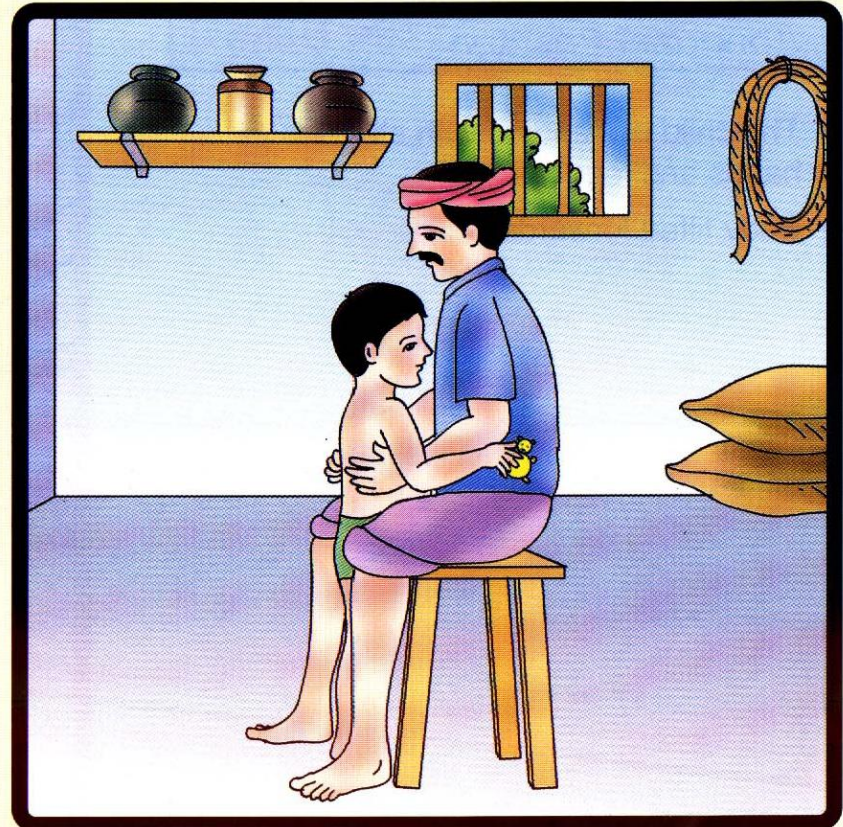
Abnormal Position (Stiff child)

- ❖ The child stands with stiff crossed hands and stiffness in the neck.
- ❖ Child's knees are bent
- ❖ Fisting of hands may be present



Correction

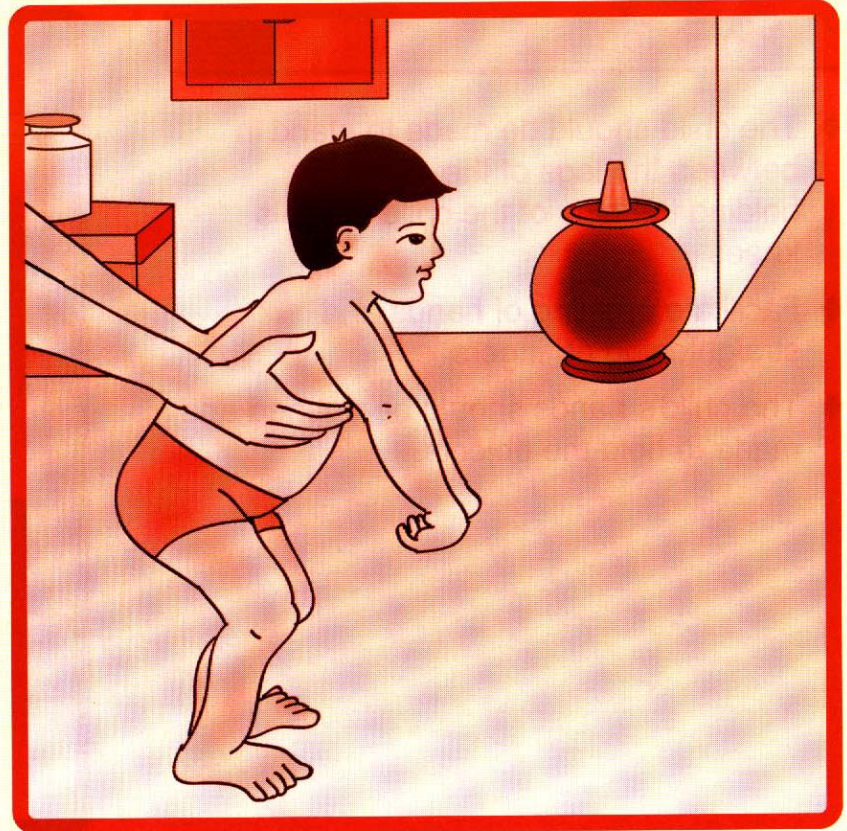
- ❖ The child should be made to stand in between the legs of the caregiver, holding the hips of the child with his knees
- ❖ Facilitate opening of hands and straightening of fingers
- ❖ The child's hands should be opened and made to hold the objects.



Use activities for relaxation

Abnormal Position (Stiff child)

- ❖ The child is standing with stiffness in hands and legs
- ❖ Body tilted forwards



Correction

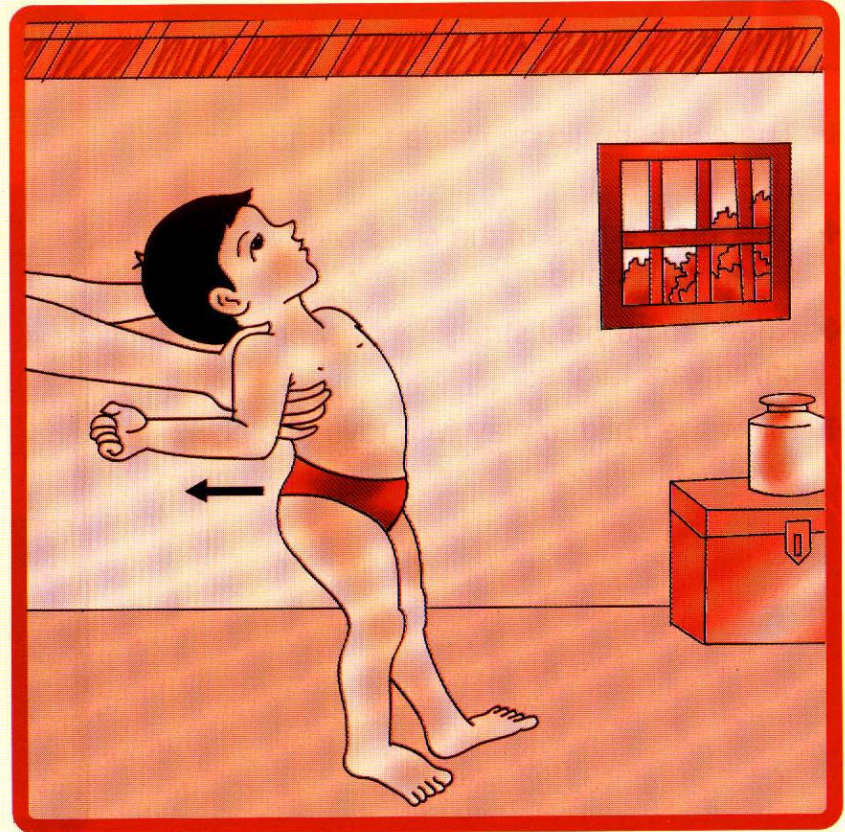
- ❖ The child should be made to stand straight
- ❖ Support the hips of the child with caregiver's hands
- ❖ Knees to be held straight inbetween caregivers thighs
- ❖ Allow the child to play with toys at elbow level



Use activities for relaxation

Abnormal Position (Stiff child)

- ❖ The child is standing with extension of back, hands and neck
- ❖ Child's hands are fisted



Correction

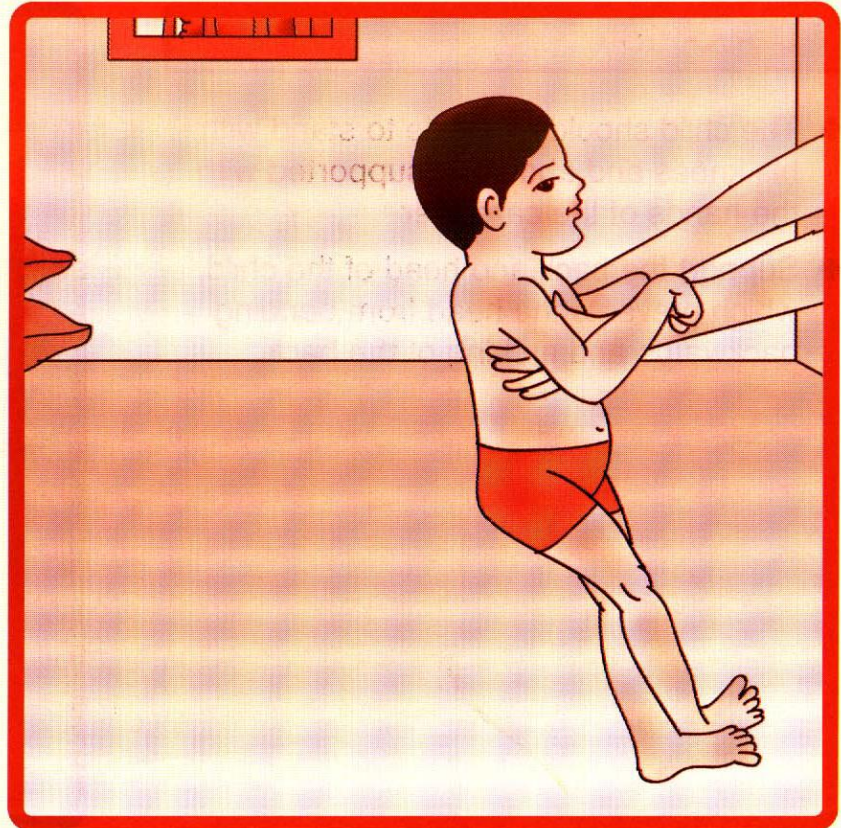
- ❖ The child should be made to stand with his knees and abdomen supported with the hands of the caregiver
- ❖ Support the back and head of the child, which prevents the head from bending backwards and arching of the back



Use activities for relaxation

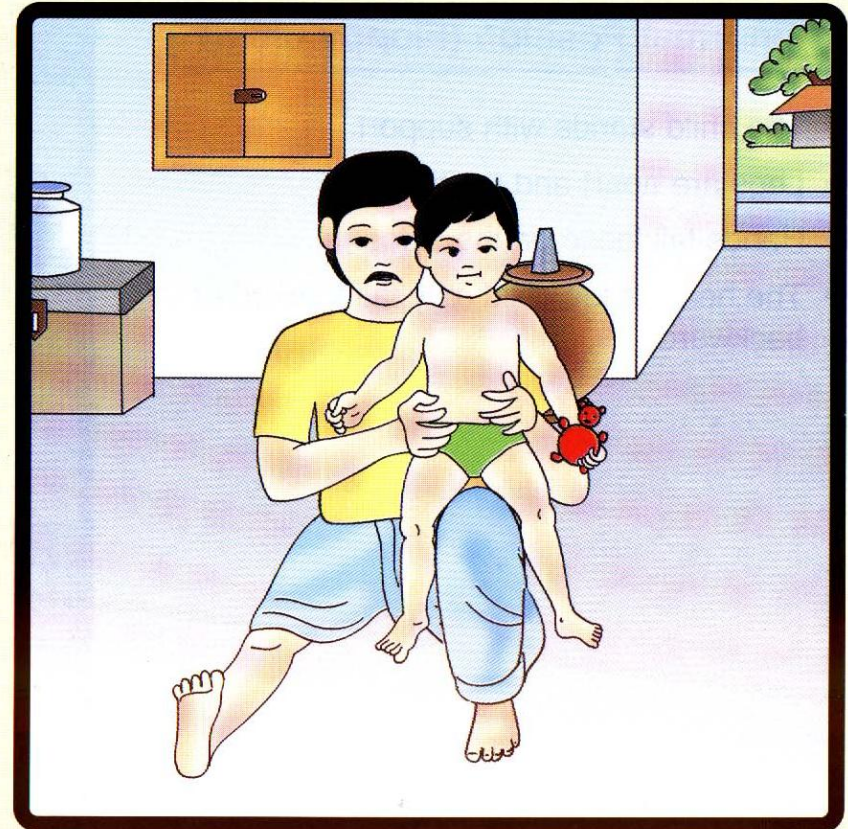
Abnormal Position (Stiff child)

- ❖ The child stands with support and crossing of legs present
- ❖ Hands bent at elbows and wrist.
- ❖ Palms held in fisting position
- ❖ Hands held close to the body



Correction

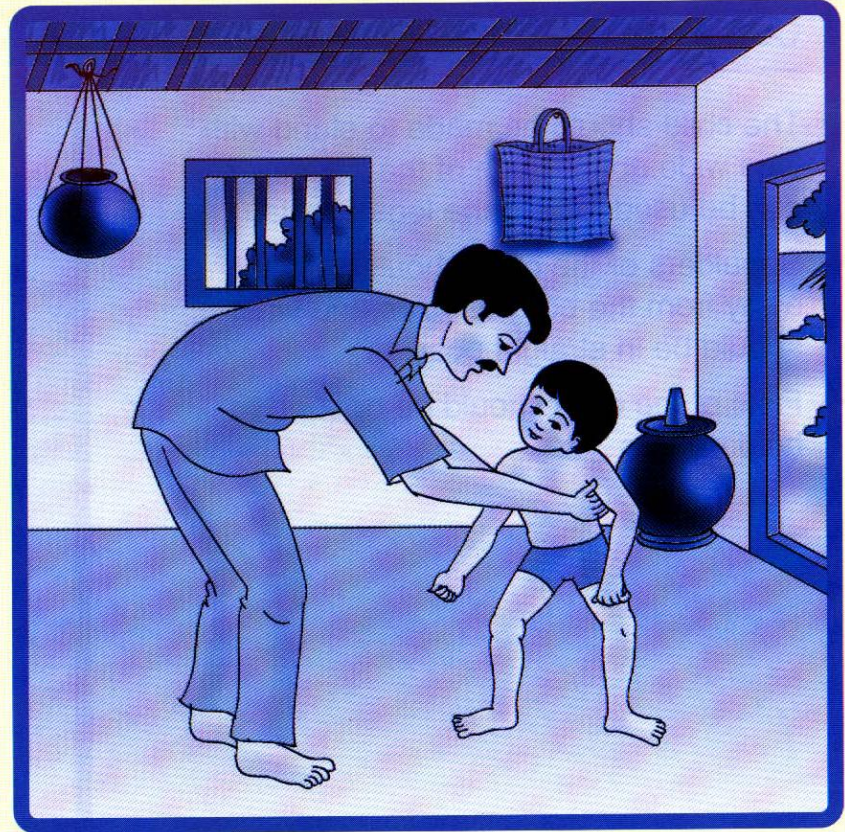
- ❖ The child should be made to stand with legs wide apart, thigh of the caregiver can be used to hold the legs apart.
- ❖ Shoulders of the child should be held away from the body. Elbows and wrist should be in straight position
- ❖ Fists of the child should be opened to hold objects



Use activities for relaxation

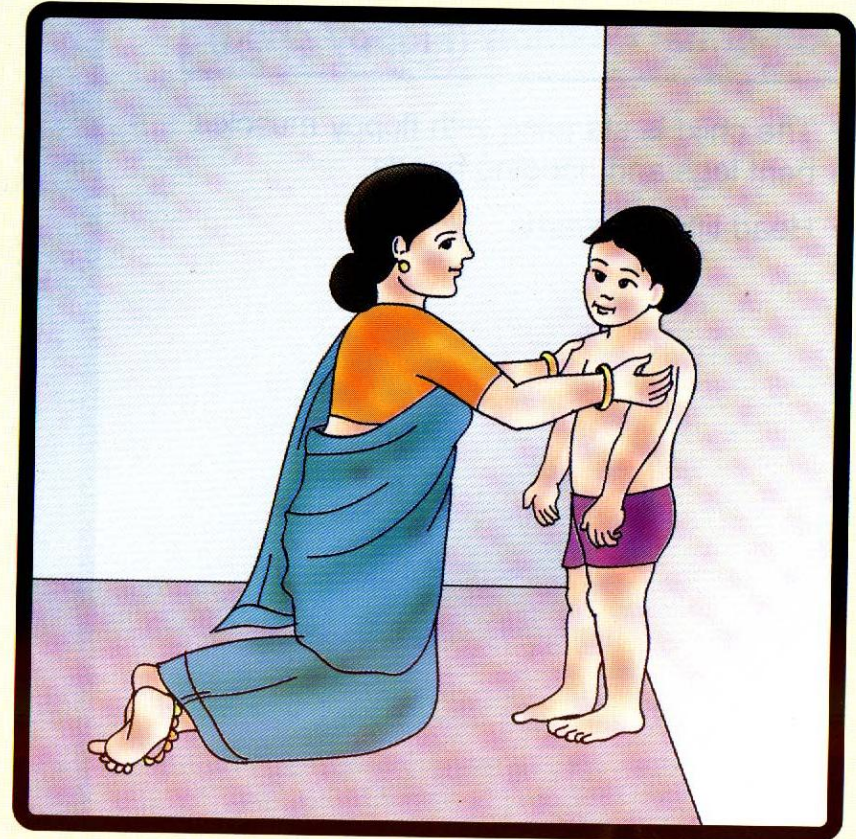
Abnormal Position (Floppy child)

- ❖ The child stands with support.
- ❖ Legs are apart and unstable.
- ❖ Hands fall loose on the sides.
- ❖ The head of the child may fall forward or backward.



Correction

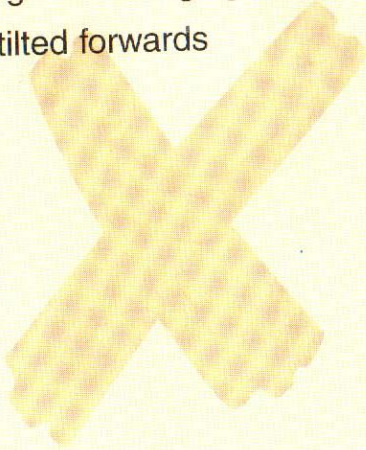
- ❖ The child should be made to stand against the wall supported by the care giver
- ❖ The shoulders should be supported and head held in straight position
- ❖ Hands should be held close to the body
- ❖ Legs to be held straight
- ❖ Feet should be placed firmly on the ground



Use activities to build up tone

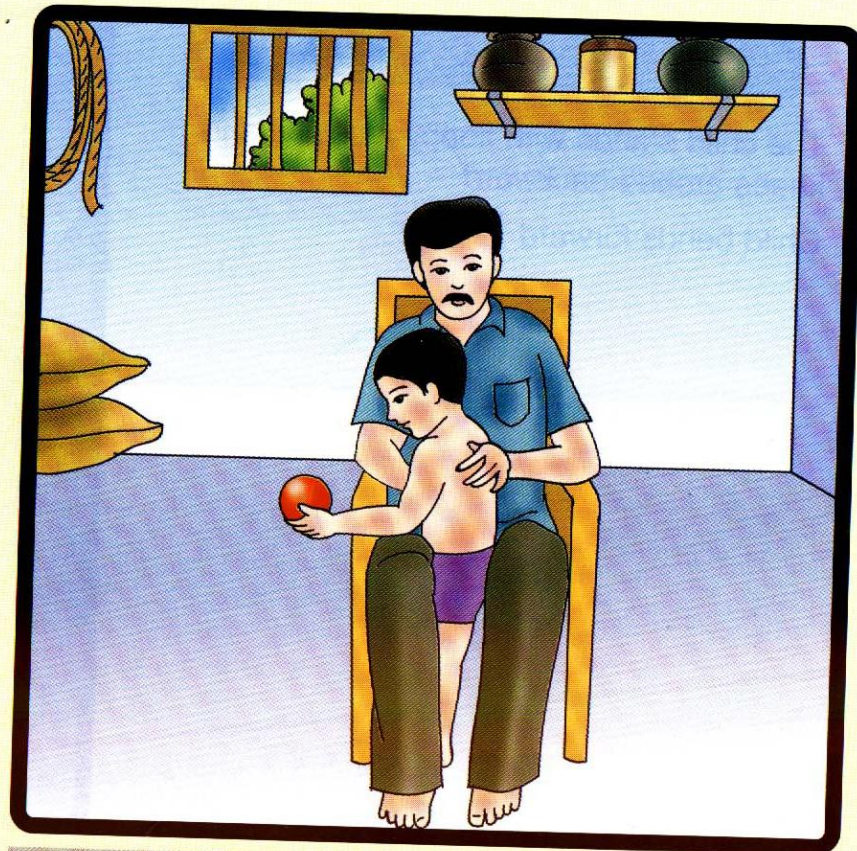
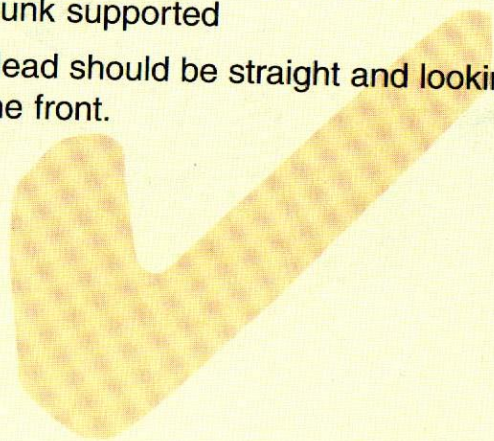
Abnormal Position (Floppy child)

- ❖ The child is standing with floppy muscles bent legs and hanging hands
- ❖ Head tilted forwards



Correction

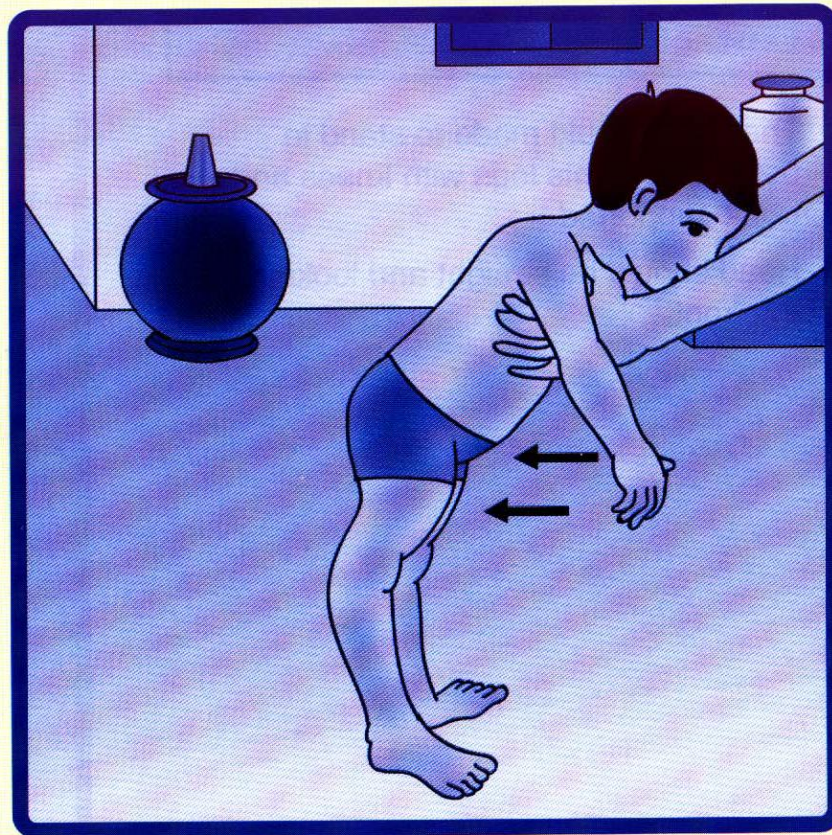
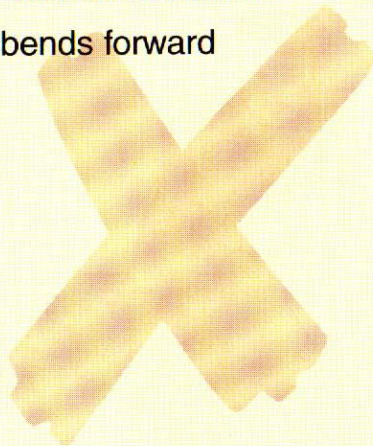
- ❖ The child should be made to stand in between parents legs with knees and trunk supported
- ❖ Head should be straight and looking to the front.



Use activities to build up tone

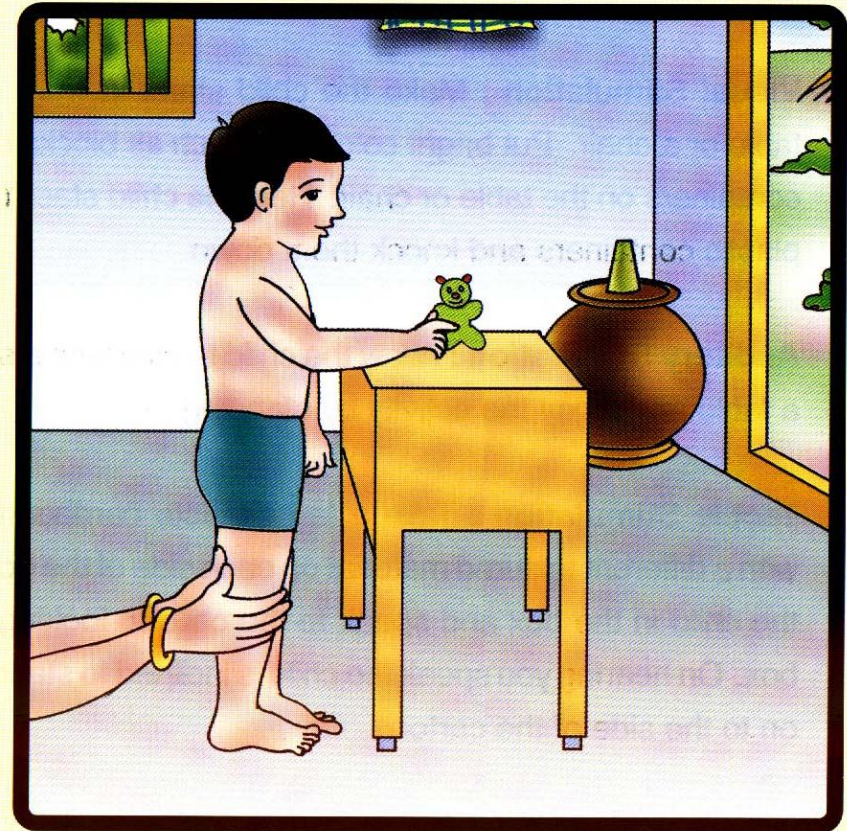
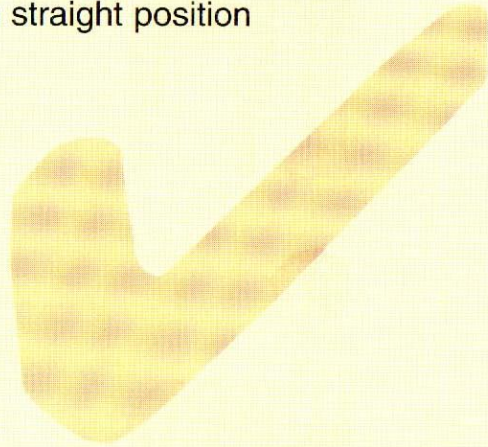
Abnormal Position (Floppy child)

- ❖ The child stands with floppy muscles and knees arched backward
- ❖ Child bends forward



Correction

- ❖ The child should be made to stand with knees firmly supported, head and trunk in straight position

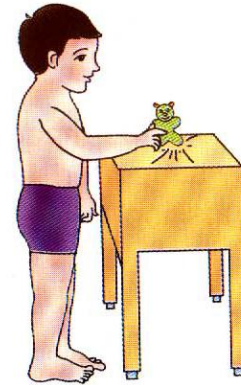


Use activities to build up tone

STANDING

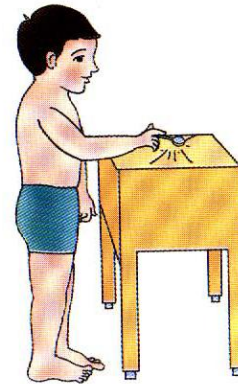
Activities for Stimulation

Visual Stimulation : Make the child stand in front of a low table or a chair. Put bright color toys such as blocks or plastic containers on the table or chair. Help the child stack blocks or plastic containers and knock them down.



Auditory Stimulation : Allow the child to play with a spoon on a table and enjoy the activity by standing.

Tactile Stimulation : Take a large waste cardboard carton with a different textured material on each side of the box. Place the child in the box and speak to the child to looking into the box. On hearing you speak the child is inclined to stand holding on to the side of the carton.

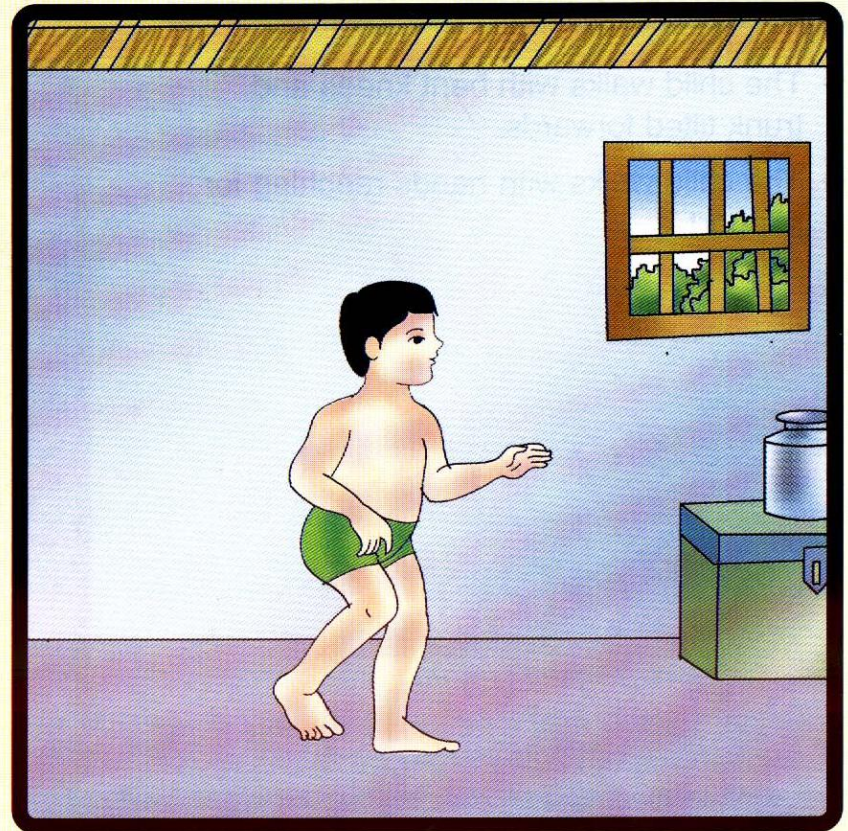


WALKING

NORMAL CHILD WALKING

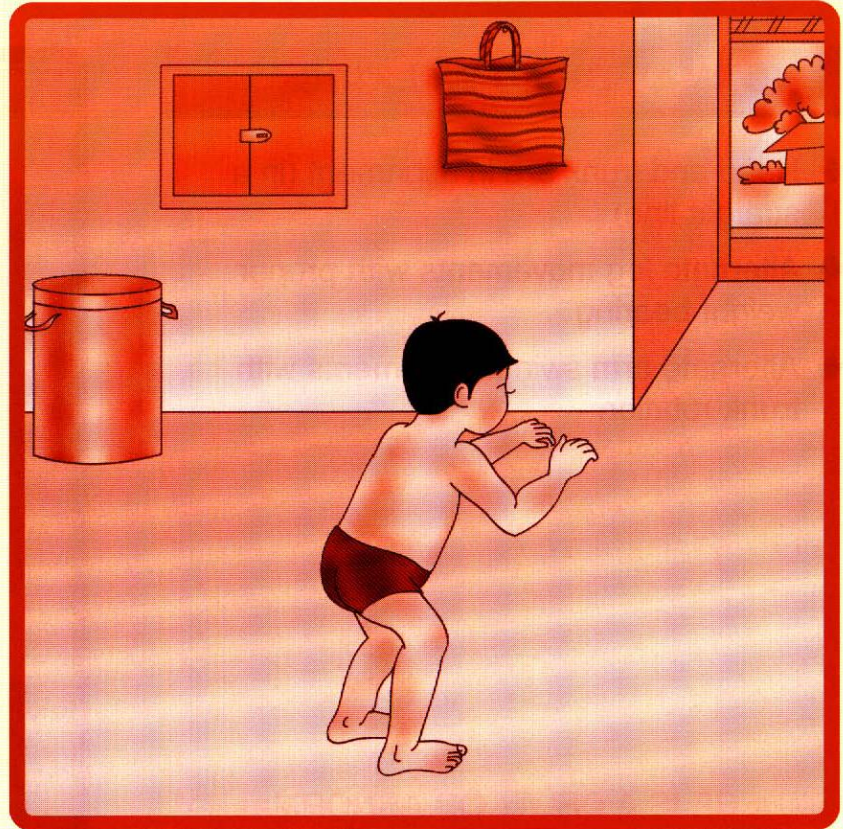
- ❖ Head and trunk are in alignment (in a straight line)
- ❖ Alternate leg movements with proper weight bearing
- ❖ Alternate arm swing movements with trunk rotation

IF THERE IS A DELAY OR ABNORMALITY
SEEK PROFESSIONAL HELP



Abnormal Position (Stiff child)

- ❖ The child walks with bent knees and trunk tilted forwards.
- ❖ The child walks with hands reaching for support.



Correction

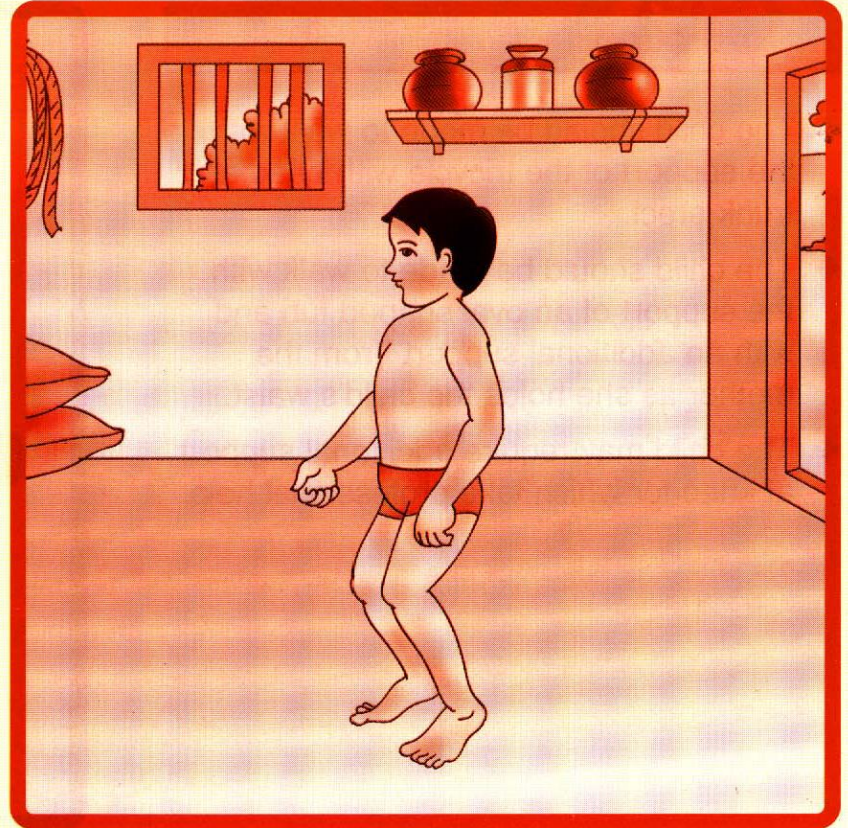
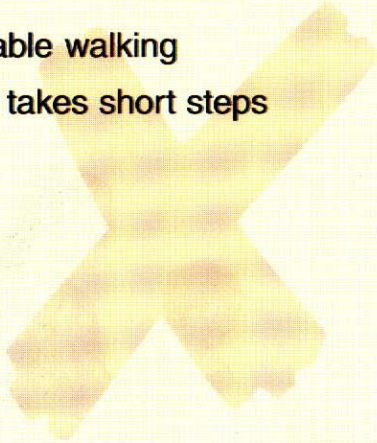
- ❖ The child should be made to walk with the support of the tricycle with head and trunk erect.
- ❖ The child should be made to walk with the support of an oval shaped tub and with an additional support from the mother as she holds the child's waist.
- ❖ The child may require additional support at knee for which take professional help.



Use activities for relaxation

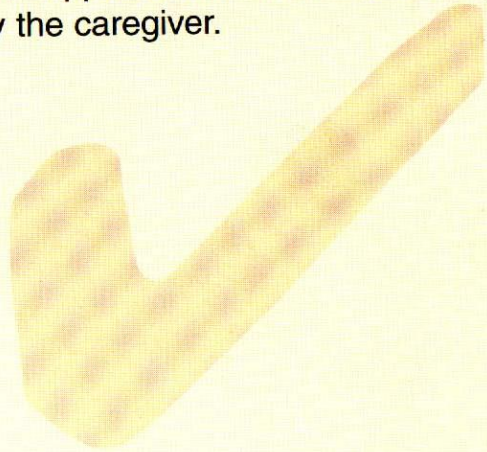
Abnormal Position (Stiff child)

- ❖ The child stands with hips and knees bent,
- ❖ Unstable walking
- ❖ Child takes short steps



Correction

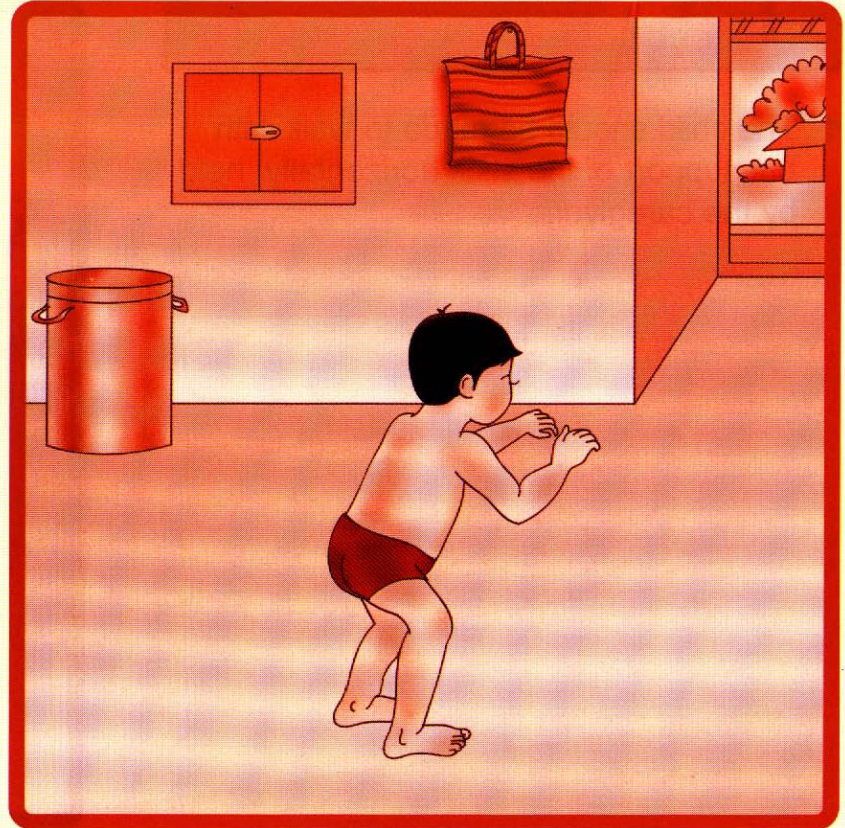
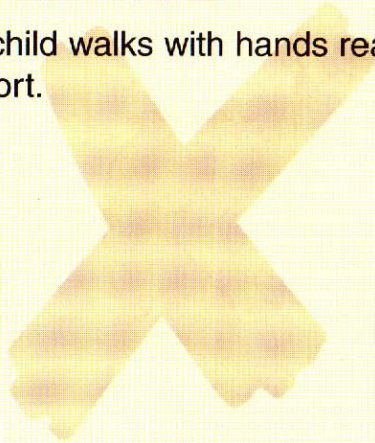
- ❖ The child should be made to walk with the support of the stick horizontally held by the caregiver.



Use activities for relaxation

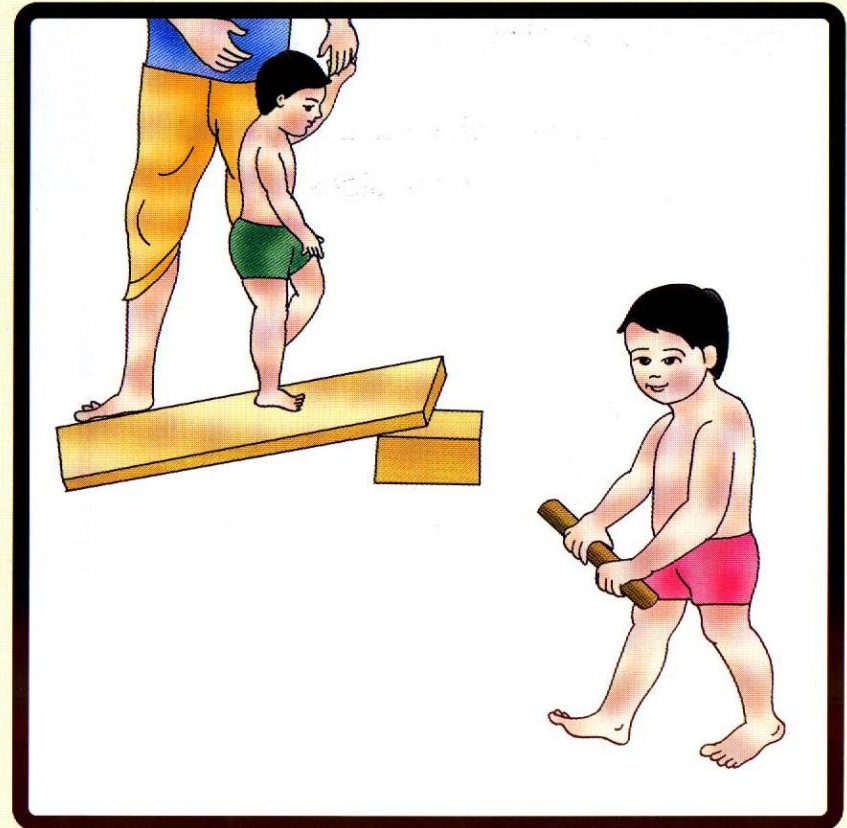
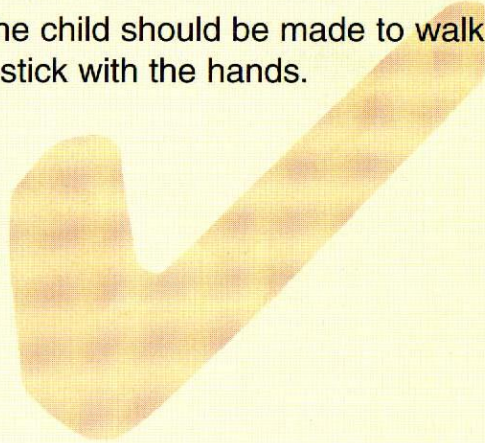
Abnormal Position (Stiff child)

- ❖ The child walks with bent knees and trunk tilted forwards.
- ❖ The child walks with hands reaching for support.



Correction

- ❖ The child should be made to walk on a ramp with one hand supported.
- ❖ The child should be made to walk holding a stick with the hands.

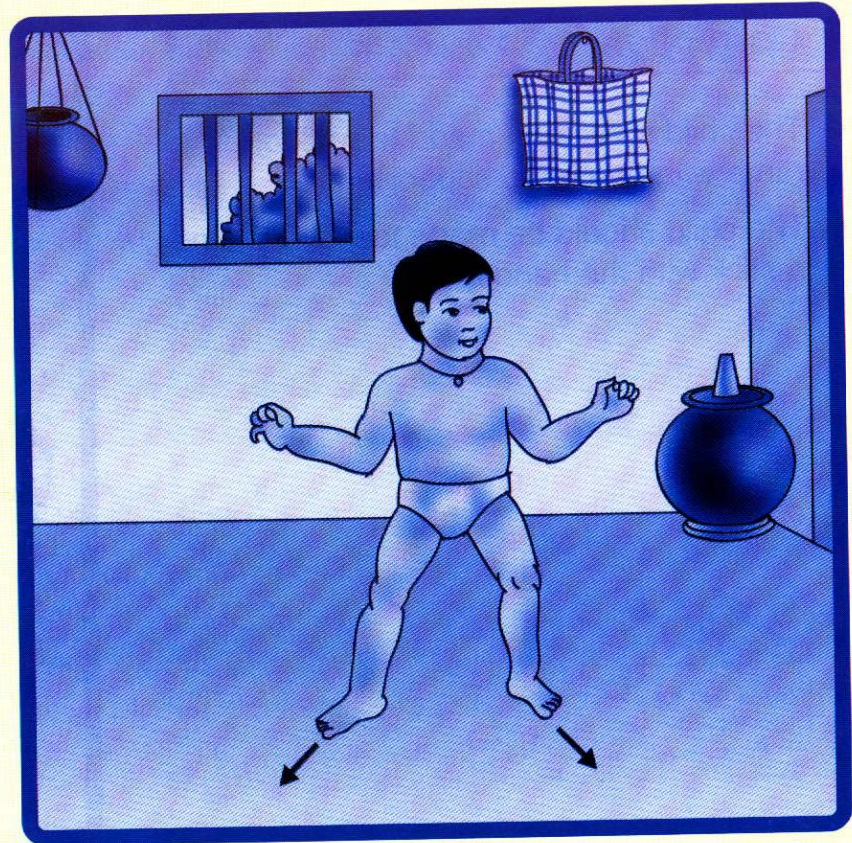
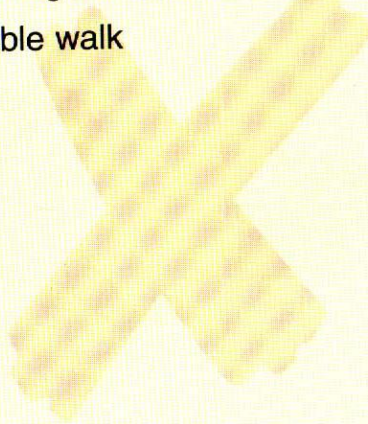


Use activities for relaxation

WALKING

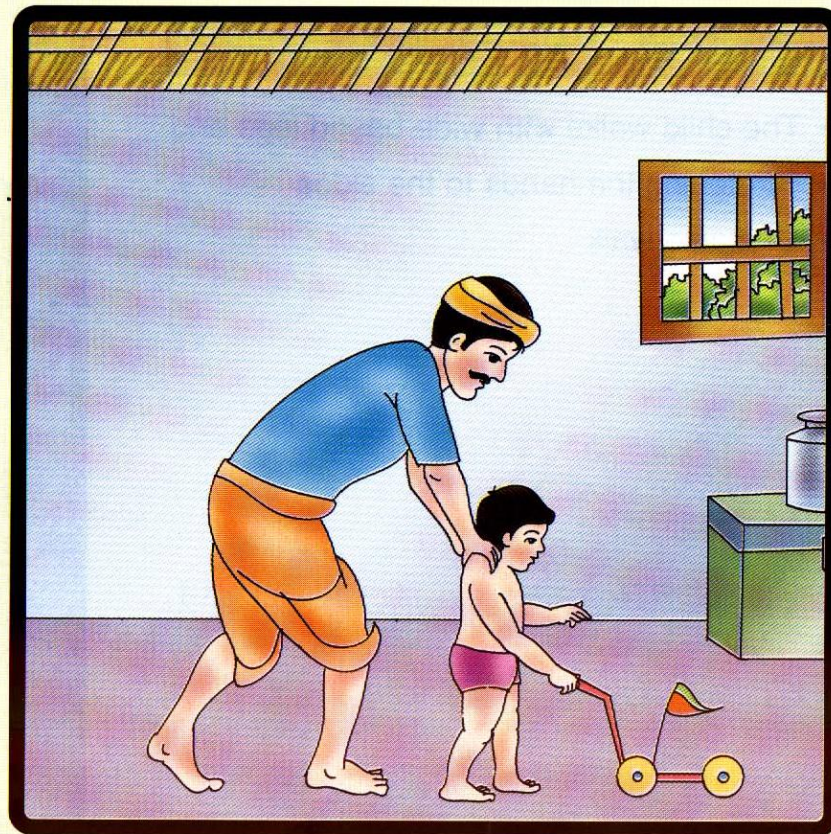
Abnormal Position (Floppy child)

- ❖ The child walks with wide based legs and
- ❖ Stretching the hands to the sides
- ❖ Unstable walk



Correction

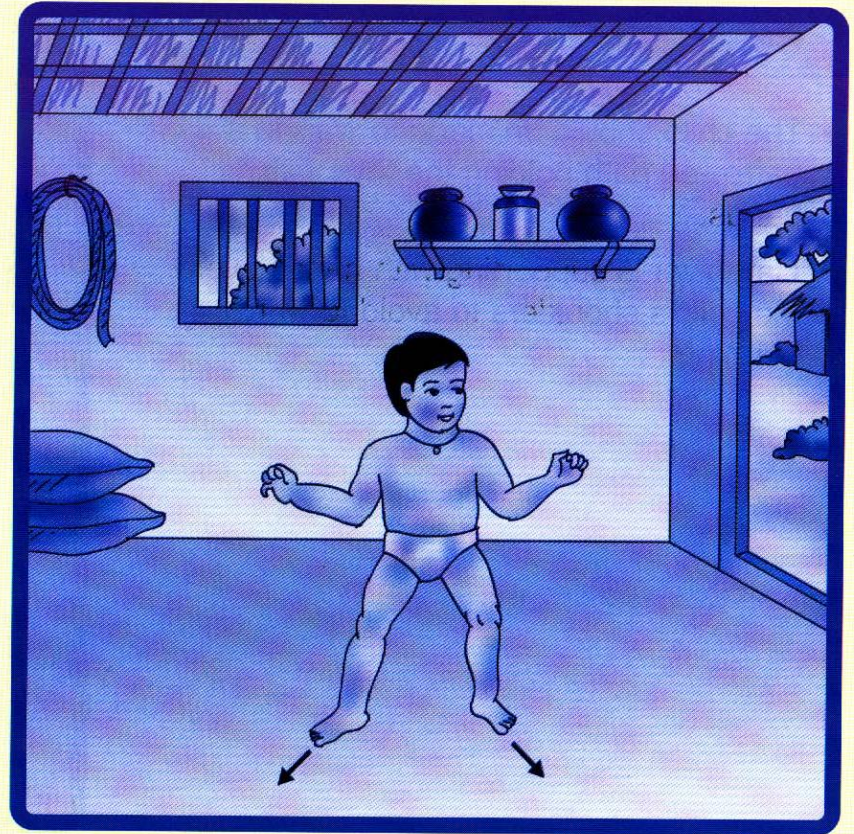
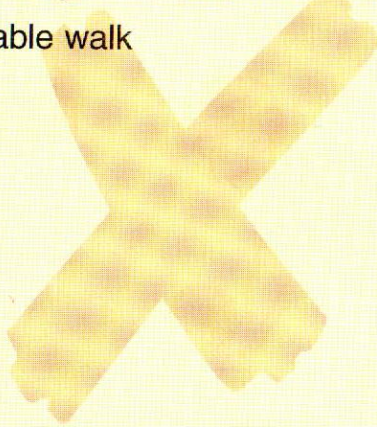
- ❖ The child should be made to walk in a narrowed path holding the toys with hands.
- ❖ Caregiver is supporting with hands over the child's shoulders to avoid forward bending.



Use activities to build up tone

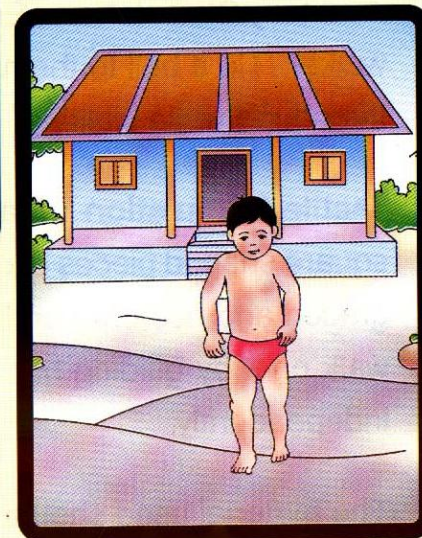
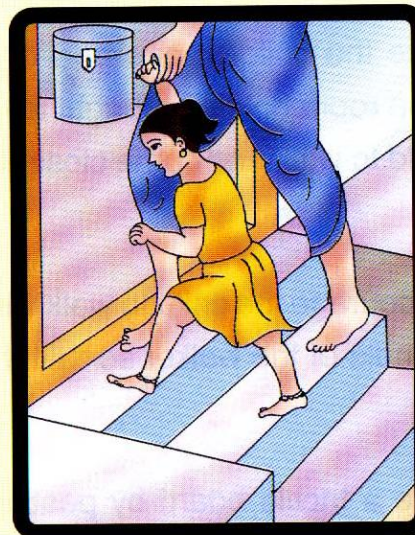
Abnormal Position(Floppy child)

- ❖ The child walks with wide based legs and
- ❖ Stretching the hands to the sides
- ❖ Unstable walk



Correction

- ❖ The child should be made to climb stairs along with the parent holding child's hand.
- ❖ The child should be made to walk on uneven surfaces, like walking on sand without support.



Use activities to build up tone

WALKING

Activities For Stimulation

Visual Stimulation : Place the child at one end of the room and stand at the other end of the room holding a bright toy or a candle or a torch. Encourage the child to walk and come closer to you to reach the toy or torch.

Auditory Stimulation : Encourage the child to walk with the help of a walker. Tie a bell to the handle of the walker so that the child enjoys the sound while walking.

Tactile Stimulation : Make a tactile board by pasting triangular or square shaped pieces of different textures such as cocount coir, sand graded and rice bran on the basis of its coarseness. Make the child walk on it by guiding him with your support if he is not able to walk independently.

The material used should be smooth and soft for a spastic child and rough and coarse for a floppy child.

