



How to support children with Severe Visual Impairment

Development

How to help children maintain or enhance their visual ability if they are still responsive to light or brightly-coloured objects?

Firstly, parents can help their children to develop visual attention ability by using illuminated toys, reflective objects (e.g. mirrors, and metal wares), sharp contrasting colours (e.g. black and white-coloured) or brightly-coloured toys. Then, they can help them to develop their visual tracking ability, such as by moving an object slowly from midline to sides or from top to bottom while encouraging them to track it with their eyes. If they show progress, move the object faster. In the beginning, a sound-emitting object can be used to draw their attention. However, it should be muted shortly afterwards to ensure that they track the object with their eyes.

What to do if children with severe visual impairment are afraid of touch or movement sensations?

Some children with severe visual impairment may dislike touching novel objects or things of particular textures. They may find sudden movement intimidating so that they prefer sitting still and dare not explore the environment. As a result, their learning will be affected.



To alleviate these problems, parents should adopt a progressive approach and should not push children to accept different sensory stimulations all at once. Parents should let their infants explore objects of different textures, e.g. putting their hands in a box filled with rice; making handprints; playing with doughs, yarn balls, and furry toys. Besides, exploring everyday objects (e.g. soap, soap bubbles, rice, ice-cream, and jelly) by touch is also an excellent tactile activity. It is important that parents should describe to their children beforehand the objects they are going to touch and the characteristics instead of putting the objects in their hands abruptly. Moreover, parents may rub/brush different parts of their children's body with a towel or soft brushes made of different materials, or massage with moisturising cream. These activities can enhance their children's ability to accept different tactile stimulations and help them establish body concept.

If children are afraid of the feeling of movement, parents should give them more opportunities to experience movement, e.g. by rocking them gently in different directions when holding them in arms; putting them on a big towel with the four corners firmly grabbed by two adults, swinging them gently back and forth or from one side to the other side. Besides, playing on the swings or bouncing gently on a therapy ball are good activities too.

How to help children with severe visual impairment develop fine motor skills (hand skills)?

Hand skills are essential for children with severe visual impairment. Although they cannot learn effectively with their eyes, they can study the characteristics of objects by touching them to differentiate their sizes, weights, textures, shapes, etc.

- ***Infancy***

Parents can put different sound-emitting toys around their infants, encouraging them to reach out to explore, touch and play with the toys. Infants can also be guided to feel their way in different positions, e.g. lying on back, lying on tummy, lying on side or sitting. When infants begin to develop finger skills, encourage them to use their first two or three fingers to pick up small things, e.g. biscuits, small pieces of bread. Besides, playing coin-inserting games, LEGO bricks, peg boards, etc. are also good training activities.



- **Preschool age**

Apart from helping children develop their fine motor skills, parents should also start to train their tactile discrimination such as differentiating objects of different shapes, textures and weights. If their ability allows, they can play more refined tactile differentiation games such as differentiating positioning of pegs on a peg board with their index finger. This can effectively prepare them for the learning of braille in the future.

Some children with severe visual impairment have weak hand grips. How can this be improved?

- **Infancy**

Encourage infants to support their body with upper limbs such as crawling, straightening their arms to support their upper body. They should also be encouraged to push heavy toys.

- **Preschool age**

Encourage them to play with clips, wring towels, and play with doughs, etc. in order to strengthen their palmar and finger grip.

Are children with severe visual impairment slow in achieving age appropriate gross motor skills? Can it be improved?

As children with visual impairment can neither be motivated to move by visual stimulation nor imitate the movements of others by looking, their gross motor development is usually slower than that of other children of the same age. In the beginning, they need adults' help to learn basic movements. However, over-protective environment and excessive assistance may hinder their gross motor development.

Without vision, it is more difficult for children to acquire balance and locomotion skills. Some of them also have low muscle tone which will further hinder their gross motor development. Fortunately, with proper facilitation and training, they can still learn and master body movements of their age level.



How to promote gross motor development of children with severe visual impairment?

- Parents can play “body games” with the children, like body and limb massage, practise basic body and limb movements, e.g. rolling, and verbally describe the movements at the same time. These activities help children to experience possible movements of their own limbs, develop body concepts, and learn the positions and functions of different body parts.
- With reference to the gross motor developmental milestones of normal children, parents can practise age-appropriate activities to facilitate their gross motor development. Parents can encourage them to roll over (i.e. supine to prone lying) when they are three to four months old; train them to sit when they are around six months old; facilitate them to pull to stand with support when they are nine to ten months old. Timeline of the development of each child may vary slightly. Some children may have additional disabilities further affecting their development.
- Through giving appropriate physical facilitation and verbal explanation during active exercise, children with visual impairment are able to develop spatial orientation. They can learn the meaning of “up”, “down”, “left”, “right”, “far”, “near”, “next to”, “inside”, “outside”, “in front of”, “behind”, etc. and how these relate to their physical positions.
- Help them familiarise with the environment so that they could move around more confidently. For example, while they start cruising around furniture, tell them what they are holding on (e.g. “daddy’s chair”, “dining table” or “you’re standing next to the TV”).
- Children need encouragement and guidance to pick up new motor skills. For example, if they cannot roll over at 3 to 4 months old, try to put them in prone position and then facilitate them to roll over to supine, or vice versa, using sound, music, tactile stimulation, etc. Parents need to choose activities that are meaningful and easy to perform, then guide them appropriately, give positive feedbacks, and correct them as required.



- When teaching children to move around independently, parents have to first familiarise them with their movement and the environment to build up their confidence, as mentioned above. Safety is essential. Children must be informed if there is any change in the position of furniture or objects. They must also be trained to go down stairs safely with adequate practice to avoid accidents.

How will severe visual impairment affect children’s communication and language development?

Without normal vision, children with visual impairment cannot see others’ facial expressions and body language clearly. They might have great difficulty imitating others to express themselves through body language as other children do, and they may also be more passive and self-centred in their social interaction. For language development, they usually need more time or special methods to learn vocabularies involving concepts that can be better understood with the help of vision (e.g., the locatives “up” & “down”, the pronouns “you” & “I”). For those with weak verbal comprehension, they may just repeat others’ words or easily go off-topic. Regarding pronunciation, they usually have no major problem.

How to establish good communication with the children when they are unable to see clearly and not yet able to speak?

Due to their inability to see the surroundings well, children with visual impairment may get upset easily and appear to be socially passive. However, they must not be mistaken as not enjoying the social communication. Parents should take the initiative to talk to them, describe what is around them, and help them to comprehend the environment with their senses so as to develop a sense of security. Parents should carefully observe their children’s needs as well, facilitate them to use sounds and words to express themselves. Parents can also guide the children by hand to encourage them to use body language to express their needs (e.g., pushing things away or shaking their hands to indicate rejection, stretching out their hands to show acceptance). Some facilitation skills include:



- Assign a specific caretaker and set up a daily routine for the children. Get used to talking with them in everyday situations.
- Make good use of different sensory stimulations. For instances, let the children touch the face of the person speaking to them so that they may tell who the speaker is; let them touch their milk bottle so that they know it will be time to have their meal soon; play a familiar lullaby to prepare them for bed time; let them smell body wash to get them ready for a bath.
- Talk more with the children or make interesting sounds to encourage sound imitation. Alternatively, imitate the sounds the children produce to stimulate them to have more vocalizations.
- Encourage children to actively participate in singing activities, parents may hold their children’s hands, move their hands and legs while singing (e.g. the song “Head and Shoulder”). This may help to facilitate vocalization and develop verbal understanding as well as reciprocal interaction.
- Choose suitable toys to facilitate social communication. Real objects can better motivate them to explore than plastic toys, because different textures of real objects can give them more sensory stimulation. Parents may fill a basket with daily objects (e.g. plastic bottles, boxes, cutlery, toothbrushes, and towels) and let them explore. Parents can find many good topics to talk with them in the process.

What can be done if their language ability is weaker than other children of the same age?

Children with visual impairment usually need more time to develop their verbal understanding and expression. Parents can help in the following ways:

- Call out their names to get their attention before speaking to them.
- Encourage them to express their basic needs by using vocalisations, body language or words starting from a young age.



- Linguistic concepts cannot be acquired by just listening to television, electronic books or children’s songs. Visually impaired children usually need more hands-on experience to develop their understanding of vocabularies. For this reason, parents have to enrich their children’s life experience, encourage them to participate in different daily routines and games.
- While the children are engaging in different activities, parents can precisely describe things that are going on, things that the children are interested in and their responses. Do not just name the objects.
- Wait for them to respond. Where necessary, use other sensory means or hold their hands to explore, to help them make sense of the immediate environment.
- Show them how to express appropriately. For instance, take their hands and teach them to stretch out their hands to make a request.
- If their expression is immature, demonstrate a correct expression and expand their utterances, such as follows:
 - “Ball, ” the child said.
 - “Kick the ball (or The big ball),” the mother replied.
 - “Mummy ball,” the child said.
 - “Mummy is kicking the ball (or Mummy is throwing the ball),” the mother added.



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