



How to support children with Visual Impairment Development

How to maintain or enhance the visual ability of children with visual impairment?

- ***Infancy***

First, help them develop their visual attention ability by using illuminated toys, reflective objects (e.g. mirrors, metal wares, etc.) sharp contrasting colours (e.g. black and white-coloured) or brightly-coloured toys to draw their attention. Then, help them develop their visual tracking ability, such as by moving an object slowly from the midline to the sides or from the top to the 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.

- ***Preschool age***

Train their visual discrimination ability by encouraging them to observe the environment more with their eyes, e.g. asking them to look for specific things in a designated area of a park/supermarket, spot the differences between two similar pictures/photos. Parents should read more with their children and encourage them to describe what they see. The words and pictures of the books should be clear and simple.



How to develop the fine motor skills (hand skills) of children with visual impairment?

- **Infancy**

Put different sound-emitting toys around them and encourage them to reach out to explore, touch and play with the toys. Choose toys that are brightly-coloured or of sharp contrasting colours (e.g. black and white). Encourage them to explore the toys in different positions (e.g. lying on back, lying on tummy, lying on side or sitting).

When they 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. Parents can also encourage them to play coin-inserting games, bricks, peg boards, etc.

- **Preschool age**

Children with visual impairment can perform fine motor activities with their fingers quite well in general. However, due to visual impairment, their eye-hand coordination may be weak. They should be engaged in activities that can train up their eye-hand coordination, e.g. threading beads, cutting paper, joining dots, drawing maze, colouring within lines. Parents have to pay attention to the contrast between the background and the outline of the related objects. Pictures should be simple while the outlines should be clear. In general, complex and detailed pictures are harder to differentiate while thicker lines are easier to see than thin lines.

How can children with visual impairment improve their hand grip strength?

- **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 gross motor/physical activities important to children with visual impairment?

Gross motor activities are important for the holistic development of children. Every child needs regular physical activities to stay healthy. It is even more important for children with visual impairment who need suitable training to improve their balance and coordination. Improved strength and ability to control their body will also facilitate their social development. Moreover, some postural exercises can help to correct their postural and gait problems.

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

Gross motor development may be hindered by visual impairment but can be improved through early engagement of the child in appropriate play and activities. Parents can play sensorimotor games with children during their infancy period, including massaging their limbs and body, limbs and body exercises (e.g. bending and stretching, opening and closing movements). With reference to the gross motor developmental milestones of normal children, parents can practise those age-appropriate activities with their children with visual impairment to facilitate their gross motor development. For instance, 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 crawl (including crawling over obstacles) and stand up when they are nine to ten months old. Timeline of the development of each child may vary slightly. Some children may also have additional disabilities affecting their development.



What physical activities are suitable for children with visual impairment?

Vision is an important sense for keeping balance and for learning movements and skills. It would be harder for children with visual impairment to develop balance control and learn gross motor skills, but proficiency in balance and basic gross motor skills is of vital importance for them to cope with daily life. Balance can be improved by training, which includes standing with feet together, standing on tiptoes, walking with narrow base, standing on one leg, etc. Parents need to give physical guidance to help their children to acquire the basic gross motor skills, such as running, jumping, hopping, forward rolling, etc. Modifications to rules and equipment would enable them to take part in some ball games, e.g. using balls with bells inside or sound-emitting and brightly coloured targets.

Organisations, including the Ebenezer School & Home for the Visually Impaired, the Hong Kong Society for the Blind and the Hong Kong Blind Union, organise recreational and sports activities for children with visual impairment and their caretakers. The Hong Kong Paralympic Committee & Sports Association for the Physically Disabled and the Hong Kong Blind Sports Federation also provide systematic sports training and competition opportunities for the visually-impaired. The former offers training in bowling, lawn bowls, swimming, track and field events, etc. The latter provides regular training in tandem bike, archery, goalball, futsal (5-a-side football), swimming, marathon, golf and bowling. Parents can check out these activities and training programmes and develop the interest of their children.



Child Assessment Service, Department of Health
Hong Kong Special Administrative Region Government

Copyright © July, 2021

