

Welcome to our Occupational Therapy Workshop

Fine Motor Skills

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Service



Outline for Today

- What is Occupational Therapy?
- Functional Skills and Strategies
 - Posture
 - Pencil Grasp
 - Hand Strength
 - Hand Dominance
 - Crossing the Midline
 - Pencil Control and Dynamic Movement
 - Scissor Skills
- Referral Service /Complaints Process



What is Occupational Therapy?

- Occupational Therapists focus on occupation, which includes anything that occupies our time from eating, to sleeping to going to school/work to playing and having fun.
- Occupational Therapists like to place occupation into three main areas; Self Care, Work & Leisure.
- Occupational Therapists aim to enhance the child's performance across all environments in which they live and learn. This includes home, school and daycare.

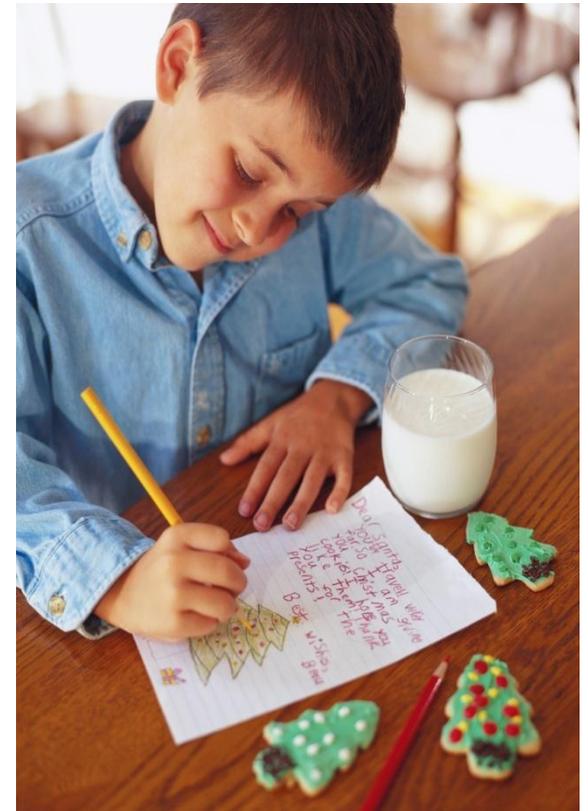


Assessment Process

- When children see an Occupational Therapist, we tend to look at three main areas of assessment; sensory processing, visual perception (looking and problem solving) and motor skills (how we use our muscles)
- We are then able to identify the child's strengths and areas of difficulty
- We then look at how these areas are impacting on a child's performance in their daily occupations

Foundation Skills: Sensory

- Sensory processing is a foundation skill for academic learning
- From a sensory processing perspective it is important that children's brains are 'just right' and 'ready to learn' before we commence practical motor and visual perception tasks
- Our behaviours and emotions also have a direct impact on our ability to attend, learn and interact with our environment.



Foundation Skills: Postural Control

- Postural control is the ability to maintain one's body in a controlled and steady position against gravity.
- Strength and gross motor coordination is a prerequisite for good posture
 - Need to maintain good balance to sit in class chair which using hands
 - Need endurance to sit, write and pay attention for a school day.
- **Stability is needed for mobility!**



Foundation Skills: Posture

- Bottom at the back of the chair
- Back straight
- Feet flat on floor (use phone book if needed)
- Small gap between tummy and desk (size of child's fist)
- Arms able to rest on desk



Fine Motor Skills

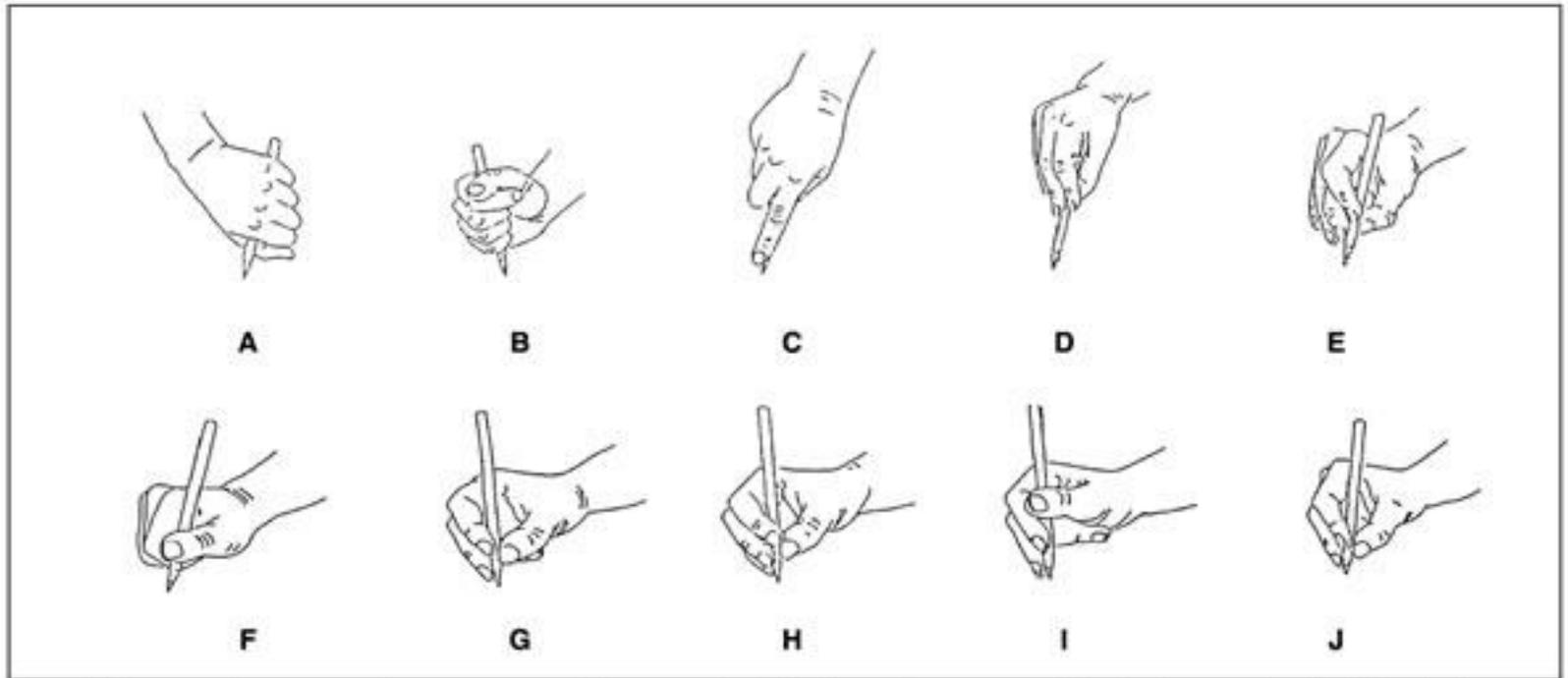
- Fine motor skills are the those which allow you to accurately use your hands and fingers to perform a skilled task.
- We learn about our environment by manipulating objects with our hands, and we use our hands to express ourselves and communicate to others.
- A fine motor activity is any activity which requires fine coordination of the hands and fingers to complete accurate and precise movements e.g. Pencil grasp
- Young children at school spend approximately 60-70% of their time completing fine-motor work or activities and approximately 12% of children experience difficulties in this area.

Pencil Grasp and Hand Strength: Observations

- May hold a pencil with too many fingers or with a unusual grasp for more stability
- Change pencil grasp repeatedly
- May press too hard when using a pencil
- May complain of sore hands or fingers
- Overly flexible joints
- May avoid completing fine motor activities
- Difficulty with fine motor tasks e.g. drawing, handwriting, cutting, threading, folding, holding a pencil etc
- May take longer than others to complete fine motor tasks



What are the different Pencil Grasps?



A = radial cross palmar grasp; B = palmar supinate grasp; C = digital pronate grasp, only index finger extended; D = brush grasp, E = grasp with extended fingers; F = cross thumb grasp; G = static tripod grasp; H = four fingers grasp; I = lateral tripod grasp; J = dynamic tripod grasp.

Figure 2 - Pencil grip postures¹⁶

Which Pencil Grasps are OK to use?

- There are now several pencil grasps that are thought to be OK. The research shows that just because a child has an atypical pencil grasp (not dynamic tripod) does not mean they will have poor handwriting.
- Generally a grasp with 3-5 fingers that allows for dynamic movement is OK.
- With older children it is often extremely difficult to change pencil grasp once it is firmly entrenched - try and establish a functional grasp in reception!
- Another general rule of thumb is if a child is performing well with the grasp they have and don't get pain or discomfort then leave their grasp.

Strategies for Pencil Grasp

- Pencil grips (for correct finger placement)
- Different sizes/textures of pencils
- Magic writing stones (encourage 3 finger grasp)
- Handi-writer or Pacer pencil (to stop children pressing hard)

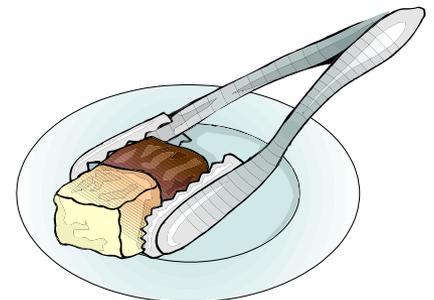


Activities for Hand Strength

- Hand strength activities need to be done frequently during the day for short periods of time in order for progress to be seen.
- One important tip for hand strength is to **encourage the child to be independent as possible in the daily routine**. Get them to help you with things, ask them to do things for themselves through the day – you can help the child and show him/her what s/he needs to do, but let them have a go first.

Activities for Hand Strength

- Games with pegs - make a peg fence, peg up art work.
- Play dough or putty - encourage lots of pinching, rolls small balls of play dough with tips of fingers (one hand only), make pinch pots, hide things to find.
- Games with tweezers - pick up small items including pieces of crumpled paper, rice, marbles.
- Tearing paper and scrunch up balls to make a collage
- Spray bottles and water pistols - if you are game...
- Cutting with scissors - the thicker the paper the harder the muscles have to work.
- Unscrewing and screwing nuts and bolts
- Threading and lacing activities
- Connecting games - like Lego.
- Drawing and writing activities



Hand Dominance

- Why is hand dominance important?
 - One hand does the “work” and the other does the holding e.g. threading, cutting, drawing
 - If a child keeps swapping the “doing” hand they do not get enough practice to become skilful at a task
 - Many children with mixed dominance do not have mature fine motor skills
 - It is for a child to achieve dominance!



Hand Dominance: Strategies

- Things to try:
 - Always offer tools to child in their midline
 - Don't try and choose which hand a child should use – although observe which one you think is used more often and more skilfully
 - If observed that child has difficulty crossing midline, try activities that will assist with this
 - Hand strength activities to build endurance
 - Give the child lots of activities where one hand does the work and one does the holding e.g. threading, cutting, cooking, bat and ball games, paper weaving – what others can you think of?
 - This way they will eventually decide which is the best hand to use

Pencil Control & Dynamic Movement: Observations

- May take longer than others to complete fine motor tasks
- Wrist off the table
- Movement comes from whole arm or wrist
- Difficulty writing in lines: letters too big
- Difficulty with activities which require control of pencil e.g. mazes
- Tends to scribble when colouring
- Writing and drawing tends to be messy



Pencil Control and Dynamic Movement: Strategies

- Encourage children to ‘wiggle fingers’
- Birdy beaks
- Spirals on paper
- Colouring in small areas (little circles)
- Push down on child’s wrist “kiss the table with your wrist”
- Use a stamp, sticker or ‘pretend’ glue to encourage child to keep wrist on table
- Vertical surfaces - get child to plant wrist on board (this will make their wrist fall backwards) they will have to use their fingers and dynamic movements to complete task.



Pencil Control and Dynamic Movement: Activities

- Mazes in which child has to draw a continuous line from start to finish
- Dot to Dot worksheets
- Tracing: around stencils, over pictures with tracing paper, around objects
- Any other activities which practices use the thumb, index and middle fingers: using tweezers to pick up small objects, unscrew nuts and bolts, lacing and threading etc

Scissor Skills: Observations

- Incorrect grasp of scissors
- Poor strength
- Difficulties coordinating
- Cuts in the incorrect direction
- Fatigue
- Holding the paper with fingers on top
- 'chicken wings'
- Difficulty orientating the paper

Development of Scissor Skills

1. Learning to hold scissors properly
 2. Learning to open and close scissors
 3. Learning to hold paper
 4. Learning to snip paper
 5. Learning to cut in one direction
 6. Learning to cut along a straight line
 7. Learning to cut corners
 8. Learning to cut curves
 9. Learning to cut complex shapes
- Children need to go through all of these stages in order to learn how to cut properly!



Four Main Rules

1. Thumbs on top
2. Turn the paper
3. Cut on the line
4. No chicken wings!



1. Thumbs on top



- Draw a little person on each of child's thumbs - explain they always needs to be on top to see where you are cutting. If child has thumbs down you can ask "Where has your little person gone?"
- Stick little stickers on child's thumb (or draw some other cue) to remind them to keep thumbs on top.

2. Turn the paper

- Use the analogy that the paper is a steering wheel, when you get to the corner you need to STOP and TURN the steering wheel before you can go again!
- Use verbal cue “Turn the paper when you get to a corner!”



3. Cut on the line

- Try self-opening scissors (so children can 'get the feel' of cutting)
- Try partially taping up top hole of scissors to encourage use of end of thumb.
- Use a visual cue – put a sticker on the tip of scissors, so child can match with line
- Use a graded approach - try snipping first, progress to cutting straight lines, then progress to cutting curved lines and finally more complex shapes.
- Use a graded approach - thicker paper or straws may be good to start with and progress to thinner paper.
- Use a graded approach - give children a 1cm thick line to cut along first, progress down to a 0.5cm line then finally a single line.

4. No chicken wings!

- Use 'No chicken wings' or 'elbows in' as verbal cues
- Keeping elbows in encourages a 'thumbs up' position and keeps
- Ensure that the child is cutting in the correct direction and have the correct scissors:
 - left hander → has left handed scissors and is cutting in a clockwise direction.
 - right hander → has right handed scissors and is cutting in an anticlockwise direction.

Activities for Scissor Skills

- The first step in cutting is learning how to snip. It is too difficult at first to cut using a continuous motion but snipping prepares for this:
 - Snip narrow strips of paper into lots of pieces.
 - Make playdough snakes then snip them into pieces.
 - Snip straws or string into pieces.
 - Snip the edges of a sheet of paper to make a placemat.
 - Snip around the edge of a picture of a face to make hair.

Activities for Scissor Skills

- At first, cutting is achieved one snip at a time. Don't expect perfection! When this is achieved move on to cutting on a line:
 - Stick stickers / stamps in a line on a piece of stiff paper and ask the child to cut from sticker to sticker
 - Punch holes along the top of a page and get the child to cut from hole to hole
 - Glue pop sticks / ribbon in two parallel lines onto a page and get your child to cut in between
 - Cut along a variety of textures. e.g. corrugated cardboard, sandpaper, thick foil, thin plastic.
 - Let your child help to cut open packets of chips before they have a snack

Activities for Scissor Skills

- When the child can cut on the line, then they are ready for more complicated cutting like curves and corners:
 - Cut out pictures from birthday cards or magazines
 - Cut out different materials to make a collage, e.g. cars, hands, colours, flowers etc.
 - Make a mask from a paper plate
 - Colour and cut a picture to make your own puzzles
 - Cut out cellophane to make a stained glass window
 - Make a chain of paper dolls
 - Cut out basic shapes in different colours. Glue these to paper to make a picture e.g. person, truck etc.
 - Make paper chains to hang around the house or put a face on the end and make a caterpillar

Referral to Occupational Therapy

- We understand that this can be a confusing process and we are working to make it less so!
- Are there any questions on OT referrals or how the system works?

More Questions...??

- Are there any students that you would like to discuss?
- Is there anything that you would like to discuss or share more information about...
- MORE QUESTIONS?
- Complaint website NHS –
- <http://www.nhs.uk/chq/pages/1084.aspx?categoryid=68&subcategoryid=162>