Appendix 3

Positioning

Positioning to achieve stretch

Examples include:

- **Long sitting**: This stretches the hamstrings, as the knees are extended while the hips are flexed. For the younger child this can be done without a special seat, though a special seat that promotes the 90-degree angle of the hip and ties the knee in extension can be a great help. (See Figure A3.1.) If an AFO plus knee immobilizer are worn while the child is positioned in long sitting, stretch of both the calf and hamstring muscles can be achieved.

Figure A3.1 Long sitting.

- **Side sitting**: This gives a nice stretch to the side with the balancing hand. It also stretches the wrist if there is any upper extremity tightness. See Figure A3.2.

Figure A3.2 Side sitting.

- **Tailor sitting**: This stretches the hip adductors but also promotes hip external rotation. See Figure A3.3.

Figure A3.3 Tailor sitting.

- **Prone positioning**: This stretches the hip flexors. Prone propping is a position in which the child lies on their tummy with their feet out behind them and elbows on the floor. In prone lying, the elbows are straight. A triangular wedge is very handy to help promote this position. See Figure A3.4.

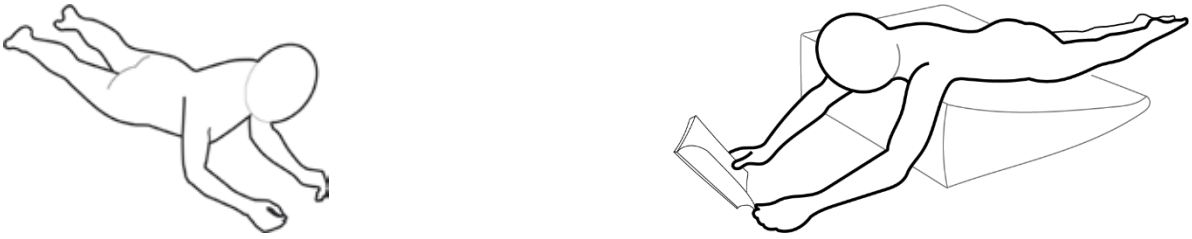

Figure A3.4 Prone propping.

- **Standing**: This stretches the hip flexors, the hamstrings (knee flexors), and the gastrocnemius and soleus muscles. This includes standing while holding on to furniture, standing with orthoses or knee immobilizers, and standing with various standing equipment. Sometimes the equipment allows children to stand on an incline, which helps stretch the gastrocnemius muscle.

Some positions for strengthening

Examples include:

- **Prone positioning** (prone propping; see explanation above): This position promotes shoulder stability and improves trunk control through core strengthening. Crawling involves movement while in a prone position.
- **Tailor sitting**: This promotes the development of trunk control (i.e., trunk strengthening and balance reactions). It also encourages more active play, and because the two hands are free, it encourages crossing the midline (using both sides of the body together).
- **Standing**: Standing strengthens trunk and leg muscles. Playing while standing is also important for developing balance reactions.
- **Side sitting**: This promotes the development of trunk control and balance reactions. It should be practiced evenly on both sides.

- **Sitting on a large roll or bolster with feet supported on the floor**: The child can play at a table in this position. The hips, knees, and ankles are at 90 degrees and both sides of the trunk are straight. This promotes the development of trunk control (i.e., strengthening the trunk muscles and balance reactions). It also encourages more active play, and because the two hands are free, it encourages crossing the midline. See Figure A3.5.

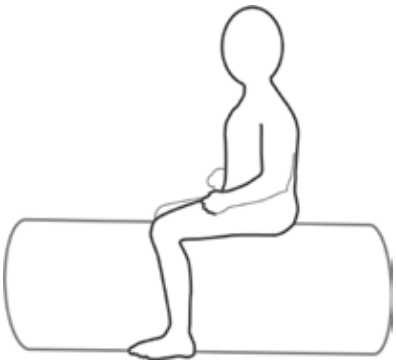

Figure A3.5 Sitting on a large roll.

- **Tall kneeling**: In this position, the child is bearing weight on their knees. The knees are flexed but the hips and trunk are extended. This position again promotes the development of trunk control and balance reactions, but because it is done in a kneeling rather than a sitting position, there is more work being done to oppose gravity. This is a good precursor to standing balance, and it is a good play position even if the child has already achieved standing. Some children also practice walking on their knees. See Figure A3.6.

Figure A3.6 Tall kneeling.