

## **CAPITALIZING ON MISSED OPPORTUNITIES FOR POSTURAL CARE**

*STEFANIE LAURENCE, B.SC.OT, OT REG. (ONT)*  
**Motion Specialties – The Motion Group of VGM Canada**

Shakespeare wrote “To sleep, perchance to dream.” From a therapist’s perspective, this is assuming that the speaker could relax enough to get comfortable enough to fall asleep, remain so long enough to reach a dream state, and not be disturbed by muscle cramping, reflux, sleep apnea, or getting stuck against a side rail. This state is not easily attainable for many people with disabilities.

A significant amount of time, effort and funding are invested into postural support in a mobility base, yet this is not the position that a person spends a large percentage of their time in. At eight to ten hours a night in bed, a third to half of a person’s life is spent in bed. The position that a person sleeps in can either reinforce or oppose their seated posture. In the latter case, destructive postures can overwhelm any therapy goals of development and maintenance of functional skills. In addition, where the person is unable to change their position, the destructive postures can quickly become rigidly habitualized. Postural care involves protecting the shape of the body in a straight, comfortable, position, both during the day and at night.

### **Identification and Management**

The initial step in postural care is the identification of risk. This may be readily apparent based on obvious physical deformity, recommendations for surgery, difficulty in positioning in seating system or performing physical care. However, early identification of risk may be more subtle; tendency of a head to turn to one side, unequal tightness of musculature or inconsistent posturing. A mat assessment is considered the first step in the prescription process of a seating system. The information that is gleaned from that assessment is not only the essential for the seating, but can be used in the development of a postural care plan.

An early step in the mat assessment is placing the body in supine on a firm surface to eliminate the effect of gravity on the spine and negate the requirement of muscular effort to maintain a seated position. While this is not the surface that a person sleeps on, it is the opportunity to see not only what alignment can be achieved, but also how gravity acts on the body, and how it could be utilized for postural molding.

The second step in the management of postural care is teaching the person and caregivers about postural care. Once again, this is a step that should already be present in the seating prescription process. While the mat assessment is seen as an information gathering session, it is ideally also the opportunity to convey information as well. This may include describing the postural symmetries or asymmetries that are identified, and discerning where and when these are reinforced or countered, and strategies for correction. It is frequently in this discussion that a person’s night-time positioning is revealed.

The goals that are set for the seating system can be coupled with goals for achieving similar midline alignment in other positions, not only in bed, but also for bathing, toileting, standing and transport. Understanding the differences between destructive and supported postures and the concept of postural molding provides the basis for positioning regardless of what equipment is involved.

The final step in the management of postural care is the provision of equipment. Fitting and dispensing of equipment needs to be coupled with instructions on proper positioning in the system to be able to achieve the best possible alignment, as well as training in problem solving to deal with unforeseen circumstances, e.g. illness, changes in function.

### **Developing a Plan**

The concepts of support in seating can easily be translated to positioning in bed; three point support, hip guides, lateral trunk support, leg troughs and pressure redistribution, regardless whether the person is positioned in supine, prone or sidelying. Night-time is the ideal time for positioning as muscle spasms tend to be reduced, there are long periods of time with no demands on the individual hence no overflow of tone, decreased movements or changes in position and gravity can be used to assist in alignment. At the same time, careful consideration has to be given to changes that are made to a person's sleeping position. Everyone has their own set of circumstances that enable them to sleep; body posture, routine, and light level, and every person has a differing tolerance to changes in those factors. For some people drastic changes result in sleep interference while others easily take it in stride. Ideally, changes in a person's sleep position follow a sequence; supporting a habitual position with the goal of comfort, using a corrected posture for increasing periods of time, and finally increasing the degree of correction of the posture. Trying to make changes to posture too quickly or drastically are frequently the greatest reasons that night-time positioning is not accepted. Skeletal deformities do not develop over days or weeks, so it should not be expected that correction can be achieved that quickly. Just as goals are set for seating interventions so too can goals and timelines for night-time postural care.

Positioning in bed traditionally has involved a variety of pillows, rolled towels, blanket and stuffed toys. However, there are increasingly more products on the market to be able to provide reliability of positioning, which are of particular benefit when multiple caregivers are involved. Commercial products are also often more able to address issues of pressure and hygiene. Just as proper training in positioning in a seating system increases the likelihood that greater postural alignment will be achieved, so too is it necessary to provide training and documentation for night-time positioning to maximize its potential.

Sleep is a precious commodity both for the person with the disability and their caregivers. Family members whose sleep is interrupted to respond to cries of discomfort or the need to reposition during the night bear the physical and emotional cost of sleep loss. Changes in sleep patterns, decreased night waking, increased alertness during the day and easier physical management, as a result of formalized sleep positioning have been found to express themselves much sooner than skeletal changes, and have had significant impact on both the individuals and their caregivers.

Sleep is a precious commodity, and anything that will affect it must be approached with care. However, interventions that can ultimately improve sleep and posture during the day can and do have a significant role in the overall postural care plan of an individual. To sleep, perchance to dream all night long and wake refreshed, relaxed, with a side bonus of being posturally aligned – that should be the goal for everyone.

### **Speaker Bio**

Stefanie Laurence is an Occupational Therapist who has been working with people with special needs and their assistive technology in a variety of settings for the past 27 years. Stefanie is the Education Manager for the Motion Group of VGM Group Services, Canada, and in this role maintains active involvement in the area of custom seating and assistive technology equipment. Stefanie has presented across North America at conferences, universities and colleges and is a member of the planning committee for the Canadian Seating & Mobility Conference. Stefanie can be reached at [slaurence@themotiongroup.com](mailto:slaurence@themotiongroup.com).