Postgraduate Certificate in Spinal Cord Injury Rehabilitation

Orthotics And Prosthetics

AFO stands for Ankle Foot Orthosis, a type of orthotic device used to support and control the ankle and foot, often used in patients with spinal cord injuries to improve mobility and prevent deformities. Related terms include KAFO and HKAFO, which refer to knee-ankle-foot orthoses and hip-knee-ankle-foot orthoses, respectively. The AFO is a commonly used orthotic device in spinal cord injury rehabilitation, as it helps to improve gait patterns, reduce pain, and prevent further injury.

Amputation refers to the removal of a limb or a part of a limb, often due to trauma, infection, or disease. In the context of spinal cord injury rehabilitation, amputation may be a consideration for patients with severe limb injuries or infections. Related terms include prosthetic fitting and pre-prosthetic training, which are essential components of the rehabilitation process for patients with amputations.

Assistive Technology refers to the use of devices or equipment to assist individuals with disabilities, including those with spinal cord injuries. Examples of assistive technology include wheelchairs, walkers, and communication devices. Related terms include adaptive equipment and rehabilitation engineering, which are used to customize assistive technology to meet the specific needs of individuals with spinal cord injuries.

Biomechanics is the study of the movement and function of the human body, including the effects of spinal cord injuries on movement and function. In the context of orthotics and prosthetics, biomechanics is used to design and fit orthotic and prosthetic devices that are tailored to the individual's specific needs. Related terms include gait analysis and kinesiology, which are used to evaluate and improve movement patterns in individuals with spinal cord injuries.

Casting is a technique used to create a mold of the body, often used in the fabrication of orthotic and prosthetic devices. In the context of spinal cord injury rehabilitation, casting is used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include impression and molding, which refer to the process of creating a mold of the body.

Complications refer to the potential problems or side effects that can occur as a result of spinal cord injuries or orthotic and prosthetic devices. Examples of complications include pressure sores, infection, and neuropathic pain. Related terms include wound care and infection control, which are essential components of the rehabilitation process for patients with spinal cord injuries.

Controlled Ankle Movement, or CAM, is a type of orthotic device that allows for controlled movement of the ankle joint. In the context of spinal cord injury rehabilitation, CAM orthoses are used to improve gait patterns and reduce the risk of falls. Related terms include ankle stability and balance control, which are essential components of the rehabilitation process for patients with spinal cord injuries.

Dorsiflexion is the movement of the foot upwards, towards the shin. In the context of spinal cord injury

rehabilitation, dorsiflexion is an important movement that can be impaired due to muscle weakness or paralysis. Related terms include plantarflexion and inversion, which refer to the movement of the foot downwards and inwards, respectively.

Electromyography, or EMG, is a diagnostic test used to evaluate the electrical activity of muscles. In the context of spinal cord injury rehabilitation, EMG is used to assess muscle function and identify potential areas of weakness or paralysis. Related terms include nerve conduction studies and muscle biopsy, which are used to evaluate the electrical activity of nerves and muscles.

External Rotation is a movement of the leg outwards, away from the body. In the context of spinal cord injury rehabilitation, external rotation is an important movement that can be impaired due to muscle weakness or paralysis. Related terms include internal rotation and abduction, which refer to the movement of the leg inwards and outwards, respectively.

Flexion is the movement of a joint, such as the knee or elbow, in a forward direction. In the context of spinal cord injury rehabilitation, flexion is an important movement that can be impaired due to muscle weakness or paralysis. Related terms include extension and hyperextension, which refer to the movement of a joint in a backward direction.

Gait analysis is the evaluation of an individual's walking pattern, including the movement of the legs, hips, and spine. In the context of spinal cord injury rehabilitation, gait analysis is used to assess and improve walking patterns, reducing the risk of falls and improving mobility. Related terms include walking speed and balance control, which are essential components of the rehabilitation process for patients with spinal cord injuries.

Hip Abduction is the movement of the leg outwards, away from the body. In the context of spinal cord injury rehabilitation, hip abduction is an important movement that can be impaired due to muscle weakness or paralysis. Related terms include adduction and rotation, which refer to the movement of the leg inwards and around the body, respectively.

Impression is a mold or cast of the body, often used in the fabrication of orthotic and prosthetic devices. In the context of spinal cord injury rehabilitation, impressions are used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include casting and molding, which refer to the process of creating a mold of the body.

Injury Severity Score, or ISS, is a measure of the severity of an injury, often used in the context of spinal cord injuries. The ISS takes into account the severity of the injury, as well as the presence of any complications or secondary injuries. Related terms include trauma score and rehabilitation prognosis, which are used to evaluate the potential outcomes of the rehabilitation process.

Kinesiology is the study of the movement and function of the human body, including the effects of spinal cord injuries on movement and function. In the context of orthotics and prosthetics, kinesiology is used to design and fit orthotic and prosthetic devices that are tailored to the individual's specific needs. Related terms include biomechanics and gait analysis, which are used to evaluate and improve movement patterns in individuals with spinal cord injuries.

Lower Limb Orthotics refers to the use of orthotic devices to support and control the lower limbs, including the legs, feet, and ankles. In the context of spinal cord injury rehabilitation, lower limb orthotics are used to improve mobility, reduce pain, and prevent deformities. Related terms include upper limb orthotics and spinal orthotics, which refer to the use of orthotic devices to support and control the upper limbs and spine, respectively.

Molding is the process of shaping and fitting an orthotic or prosthetic device to the individual's body. In the context of spinal cord injury rehabilitation, molding is used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include casting and impression, which refer to the process of creating a mold of the body.

Muscle Tone refers to the degree of tension or stiffness in a muscle. In the context of spinal cord injury rehabilitation, muscle tone can be impaired due to muscle weakness or paralysis. Related terms include spasticity and flaccidity, which refer to the presence of excessive muscle tone and the absence of muscle tone, respectively.

Myoplasty is a surgical procedure that involves the transfer of a muscle or tendon to improve function and mobility. In the context of spinal cord injury rehabilitation, myoplasty may be used to improve upper limb function and mobility. Related terms include tendon transfer and muscule reconstruction, which refer to the transfer and reconstruction of muscles and tendons to improve function and mobility.

Neuropathic Pain is a type of pain that occurs due to damage to the nervous system, often as a result of spinal cord injuries. In the context of spinal cord injury rehabilitation, neuropathic pain can be a significant challenge, requiring a range of interventions and treatments. Related terms include nociceptive pain and phantom pain, which refer to the presence of pain in response to tissue damage and the presence of pain in a limb that is no longer present, respectively.

Orthotics refers to the use of orthotic devices to support and control the body, including the limbs, spine, and torso. In the context of spinal cord injury rehabilitation, orthotics are used to improve mobility, reduce pain, and prevent deformities. Related terms include prosthetics and assistive technology, which refer to the use of prosthetic devices and assistive technology to support and enhance function and mobility.

Pathokinesiology is the study of the movement and function of the human body in the presence of disease or injury, including the effects of spinal cord injuries on movement and function. In the context of orthotics and prosthetics, pathokinesiology is used to design and fit orthotic and prosthetic devices that are tailored to the individual's specific needs. Related terms include kinesiology and biomechanics, which are used to evaluate and improve movement patterns in individuals with spinal cord injuries.

Phantom Pain is a type of pain that occurs in a limb that is no longer present, often as a result of amputation. In the context of spinal cord injury rehabilitation, phantom pain can be a significant challenge, requiring a range of interventions and treatments. Related terms include neuropathic pain and nociceptive pain, which refer to the presence of pain due to damage to the nervous system and the presence of pain in response to tissue damage, respectively.

Posterior Leaf Spring, or PLS, is a type of orthotic device that provides support and stability to the ankle and

foot. In the context of spinal cord injury rehabilitation, PLS orthoses are used to improve gait patterns and reduce the risk of falls. Related terms include anterior leaf spring and solid ankle, which refer to the presence of a rigid or semi-rigid ankle joint.

Prosthetics refers to the use of prosthetic devices to replace or support missing or damaged limbs, including the arms, legs, and torso. In the context of spinal cord injury rehabilitation, prosthetics are used to improve mobility, reduce pain, and enhance function and independence. Related terms include orthotics and assistive technology, which refer to the use of orthotic devices and assistive technology to support and enhance function and mobility.

Range of Motion, or ROM, refers to the degree of movement that is available in a joint or series of joints. In the context of spinal cord injury rehabilitation, ROM is an important measure of function and mobility, and is often used to evaluate and improve movement patterns. Related terms include flexion and extension, which refer to the movement of a joint in a forward and backward direction, respectively.

Rehabilitation Engineering is the application of engineering principles and techniques to improve the function and mobility of individuals with disabilities, including those with spinal cord injuries. In the context of orthotics and prosthetics, rehabilitation engineering is used to design and develop custom-fitted orthotic and prosthetic devices that are tailored to the individual's specific needs. Related terms include assistive technology and biomedical engineering, which refer to the use of technology to support and enhance function and mobility, and the application of engineering principles and techniques to medical and biological systems.

Scanning is a technique used to create a digital image of the body, often used in the fabrication of orthotic and prosthetic devices. In the context of spinal cord injury rehabilitation, scanning is used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include impression and molding, which refer to the process of creating a mold of the body.

Skin Tolerance refers to the ability of the skin to withstand pressure and stress, including the presence of orthotic and prosthetic devices. In the context of spinal cord injury rehabilitation, skin tolerance is an important consideration, as individuals with spinal cord injuries may be at risk of skin breakdown and pressure sores. Related terms include pressure management and wound care, which refer to the prevention and treatment of pressure sores and other skin-related complications.

Socket refers to the component of a prosthetic device that fits over the residual limb, providing a secure and comfortable fit. In the context of spinal cord injury rehabilitation, socket design and fitting are critical components of the prosthetic fitting process, requiring careful consideration of the individual's specific needs and anatomy. Related terms include liner and suspension, which refer to the component of the prosthetic device that fits between the skin and the socket, and the system used to suspend the prosthetic device from the body.

Spasticity is a condition characterized by the presence of excessive muscle tone, often as a result of spinal cord injuries. In the context of spinal cord injury rehabilitation, spasticity can be a significant challenge, requiring a range of interventions and treatments. Related terms include flaccidity and muscle tone, which

refer to the absence of muscle tone and the degree of tension or stiffness in a muscle, respectively.

Stance Phase refers to the period of time during which the foot is in contact with the ground, including the moment of initial contact and the moment of toe-off. In the context of spinal cord injury rehabilitation, stance phase is an important consideration, as individuals with spinal cord injuries may have difficulty with balance and mobility during this phase. Related terms include swing phase and gait cycle, which refer to the period of time during which the foot is not in contact with the ground, and the complete cycle of movement from one moment of initial contact to the next.

Supramalleolar Orthosis, or SMO, is a type of orthotic device that provides support and stability to the ankle and foot. In the context of spinal cord injury rehabilitation, SMO orthoses are used to improve gait patterns and reduce the risk of falls. Related terms include ankle foot orthosis and solid ankle, which refer to the presence of a rigid or semi-rigid ankle joint.

Suspension refers to the system used to suspend a prosthetic device from the body, providing a secure and comfortable fit. In the context of spinal cord injury rehabilitation, suspension is a critical component of the prosthetic fitting process, requiring careful consideration of the individual's specific needs and anatomy. Related terms include liner and socket, which refer to the component of the prosthetic device that fits between the skin and the socket, and the component of the prosthetic device that fits over the residual limb.

Tendon Transfer is a surgical procedure that involves the transfer of a tendon or muscle to improve function and mobility. In the context of spinal cord injury rehabilitation, tendon transfer may be used to improve upper limb function and mobility. Related terms include myoplasty and muscule reconstruction, which refer to the transfer and reconstruction of muscles and tendons to improve function and mobility.

Thermoplastic is a type of material used in the fabrication of orthotic and prosthetic devices, characterized by its ability to be molded and shaped when heated. In the context of spinal cord injury rehabilitation, thermoplastic is often used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include carbon fiber and polypropylene, which refer to other types of materials used in the fabrication of orthotic and prosthetic devices.

Transfer refers to the process of moving from one position or location to another, often with the assistance of orthotic or prosthetic devices. In the context of spinal cord injury rehabilitation, transfer is an important consideration, as individuals with spinal cord injuries may have difficulty with mobility and balance. Related terms include mobilization and ambulation, which refer to the process of moving and walking, respectively.

Upper Limb Orthotics refers to the use of orthotic devices to support and control the upper limbs, including the arms, shoulders, and hands. In the context of spinal cord injury rehabilitation, upper limb orthotics are used to improve mobility, reduce pain, and enhance function and independence. Related terms include lower limb orthotics and spinal orthotics, which refer to the use of orthotic devices to support and control the lower limbs and spine, respectively.

Vacuum Forming is a technique used to create a custom-fitted orthotic or prosthetic device by heating and shaping a thermoplastic material. In the context of spinal cord injury rehabilitation, vacuum forming is often

used to create custom-fitted orthotic devices that are tailored to the individual's specific needs. Related terms include casting and molding, which refer to the process of creating a mold of the body.

Wheelchair refers to a device used to provide mobility and support for individuals with spinal cord injuries or other mobility impairments. In the context of spinal cord injury rehabilitation, wheelchairs are often used to improve mobility and reduce the risk of falls. Related terms include seating and positioning, which refer to the process of positioning and supporting the body in a wheelchair.

Wound Care refers to the prevention and treatment of skin-related complications, including pressure sores and other wounds. In the context of spinal cord injury rehabilitation, wound care is an essential component of the rehabilitation process, requiring careful consideration of the individual's specific needs and anatomy. Related terms include skin tolerance and pressure management, which refer to the ability of the skin to withstand pressure and stress, and the prevention and treatment of pressure sores and other skin-related complications.

X-ray is a diagnostic test used to evaluate the bones and joints, often used in the context of spinal cord injury rehabilitation to assess the integrity of the bones and joints. Related terms include CT scan and MRI, which refer to other diagnostic tests used to evaluate the bones, joints, and soft tissues.