

SYLLABUS FOR BRITISH CASTING CERTIFICATE EXAMINATION

RELEVANT ELEMENTARY ANATOMY AND PHYSIOLOGY

LOCOMOTOR SYSTEM

- Basic knowledge of the skeleton: Nomenclature.
Major joint movements.
Details of bones and surface anatomy of the upper and lower limbs.
The vertebral column, bony structures, normal curves and intervertebral discs.
- Joints: Basic details of the upper and lower limb joints.
- Muscular system: Main groups of muscles moving the limbs.
- Nervous system: Spinal cord in brief.
Positions of nerves relevant to casting work.
- Circulatory system: Main blood vessels of the limbs.

TRAUMA

Fractures: types, healing and complications.

Description, treatment and any specific complications of trauma to:

- Wrist and hand
- Forearm
- Elbow
- Humerus
- Clavicle and shoulder
- Foot and ankle
- Tibia and fibula
- Knee
- Femur

Awareness of complications and handling of patients with these injuries:

- Trauma to the Pelvis and Spine

ORTHOPAEDICS

Brief description of each condition and treatment, especially those where casting is involved:

- Bone infections: osteomyelitis/tuberculosis
- Congenital talipes equino varus
- Developmental dysplasia of the hip
- Foot conditions, e.g. hallux valgus
- Knee conditions
- Osteoarthritis and Rheumatoid disease
- Osteochondritis e.g. Perthes disease
- Osteoporosis

BANDAGING

Techniques of bandaging and the use of slings, collar n cuff

WALKING AIDS

Basic principles, give safe instructions on use and be able to measure for the correct length/height

CASTING ROOM ISSUES

HEALTH AND SAFETY

MEDICO LEGAL:

- Record keeping / documentation
- Informed consent
- Ethical matters

CASTING TECHNIQUES

- Assessment of patient including relevant history
- Basic casting technique
- Use of apparatus in the casting room
- Care of patients in casts:
 - i. Trimming, drying and windowing
 - ii. Checking of patients in casts
 - iii. Verbal and written advice given to patients
 - iv. Communications skills
 - v. Complications of cast fixation, prevention, detection and treatment
- Walking attachments for leg casts
- Removal of casts and subsequent care

SPECIFIC CASTS

Appropriate use of materials including plaster of Paris and alternative casting materials. Understanding of how to use and create:

- Soft products and combicast techniques.
- Producing the correct layers of resin based materials and using products making use of their properties

Positions, extent of cast and basic technique of:

Slabs:	Metacarpal slabs	Knee
	Below elbow	Below knee
	Above elbow	'U' Slab

Casts:

POP		Lightweight resin based materials	
Below Elbow	Below knee	Below elbow	Slipper
Bennett’s type	Above knee	Below elbow (FRC or Soft combicast)	Below knee
Above elbow	Casts for clubfoot	Bennett’s type	Leg cylinder
		Scaphoid	Above knee
		Arm cylinder	Sarmiento type
		Above elbow	
Should have applied these casts on the course and understand the principles.			
Should be able to discuss care and troubleshoot any problems:			
<ul style="list-style-type: none"> • Corset/jacket • Frog type • Shoulder spica • Functional bracing: Humerus, Femur & Tibia • Negative casting 		<ul style="list-style-type: none"> • Hip spica • Broomstick • Minerva jacket (demonstration only) • Resting splints for limbs 	
Understand the principles of orthopaedic bracing and be aware of the following applications:			
<ul style="list-style-type: none"> • Futura wrist brace • Fixed walker Boots • Tri-panel knee splint 		<ul style="list-style-type: none"> • Humeral brace • Bohlar Walker and Iron • Range of movement knee braces 	

ADDENDUM TO SYLLABUS

During the practical part of the examination, candidates may be required to apply casts in Plaster of Paris and one of the following resin based materials:

BSN Medical: Deltacast Conformable or Elite; 3M: Scotchcast Plus or Poly Premium; Benecare: Polyester or Advanced

Should the Exam require the use of the soft materials we have:

3M softcast, BSN Delta Cast Soft, and Benecast Flex, and all fibreglasses available are from these companies