ORTHOPAEDIC SUB SPECIALITIES FELLOWSHIP IN THE MINISTRY OF HEALTH, MALAYSIA.

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ORTHOPAEDIC SUB SPECIALITIES FELLOWSHIP IN THE MINISTRY OF HEALTH, MALAYSIA.

Objectives

The objectives of the Orthopaedic Sub Speciality Training Programme are: -

- 1. To produce competent and safe Orthopaedic & Traumatology sub specialists capable of independent practice.
- 2. To further improve the quality and standards of Orthopaedics & Traumatology in the country.
- 3. To enhance and make accessible the delivery of high quality Orthopaedics & Traumatology care to the public.

Areas of Training

- 1. General Orthopaedics and Advance Musculoskeletal Traumatology
- 2. Spinal Surgery
- 3. Joint Arthroplasty
- 4. Hand and Microsurgery
- 5. Sport Injuries and Arthroscopy
- 6. Pediatric Orthopaedics
- 7. Orthopaedic Oncology

Orthopaedic Sub Specialty Training Committee (OSSTC)

This committee oversees the planning, organization and conduct of the training programmes. The committee meets 2 times a year or whenever directed to do so. The Orthopaedic Sub Speciality Training Committee comprises of: -

- 1. Ketua Perkhidmatan Otopidik (Co-coordinator)
- 2. The Programme Heads of all the sub specialties.

Advisers: 1. Timbalan Ketua Pengarah Kesihatan (Perubatan), KKM

- 2. Pengarah Perkembangan Perubatan, KKM
- 3. Cawangan Pembangunan Profesyen Perubatan, Bhg. Perkembangan, KKM

Functions of the committee: -

- To ensure a high standard of training suited to the needs of the country
- Review the training curriculum, short attachments & overseas training
- Review & monitor the accreditation status of training centers and the appointment of trainers
- Monitor the progress of trainees and make recommendations
- To recommend to KKM on the appointment of examiners / assessors to conduct appraisal/assessment of the trainees
- Evaluate and recommend to KKM the successful candidate for certification
- Advise KKM and recommend disciplinary actions / termination of training on any trainee involve in gross misconduct.
- Re-certification, re-validating and audit of the programme and the candidates.
- Oversees all other matters pertaining to the training programme and its implementation in accordance to the objectives and planning.

Entry Requirements

The prospective candidate must fulfill all of the following criteria: -

- 1. A Malaysian citizen, confirmed in service.
- 2. Possessed a recognized postgraduate qualification in Orthopaedics.
- 3. Gazetted as an Orthopaedic Specialist
- 4. Minimum of 18 months working experience as an Orthopaedic specialist post gazettment.
- 5. Has been exemplary in behaviour, in work, in attitude and in service.
- 6. Age 40 years or less at time of application*.

Candidates are chosen by "peer selection" and importance is given to attitude and personality; able to get along well with others; being a team player; publications; presentations and other related academic activities. Other plus points includes seniority, contributions and interest shown in the sub specialty and favourable referees' reports.

* At the inception of this programme until 2007, candidates between 40 to 45 years of age with good service track records can still be considered.

Selection committee comprises of the following: -

- 1. Ketua Perkhidmatan Otopidik (Co-coordinator)
- 2. The respective sub speciality programme Heads.
- 3. 3 representatives from the respective sub speciality

Advisers:- 1. Pengarah Perkembangan Perubatan, KKM

2. Timbalan Pengarah, Cawangan Pembangunan Profesyen Perubatan, Bahagian Perkembangan, KKM

The selection committee meets in May and all applications for fellowship training must reach Cawangan Pembangunan Profesyen Perubatan, Bhg. Perkembangan, KKM, latest by the 15th of April. **Late applications will not be entertained**. Training commences in August. At least one of the Orthopaedic representatives in the committee should be the candidate's designated mentor / trainer.

As training places are limited, candidates might be offered training in sub specialty not of their first choice. Subspecialties offered for training each year depends on the availability of training posts for that year.

Successful candidates will be intimated by post and will be given 2 weeks from the date of the letter to accept or decline the offer.

There is a possibility that the successful candidate **might be transferred** to another Hospital for training if there is no training post in the candidate's present hospital. Trainees accepting the offer and is involved in transfer will be given a time frame of **one month** to report to the training hospital and to his/her designated trainer. Failing to do so without valid and acceptable reasons will result in the trainee's place being given to another candidate.

If a candidate turns down an offer of his/her first choice or refused to be transferred to another hospital for training without any good valid reasons, his / her subsequent application for training will not be considered for the following 3 years.

All decisions made by the Selection Committee are final. Applicants who have not heard from the Selection Committee by August are deemed to have been unsuccessful in their application. Unsuccessful candidates will have to re-apply for the next intake or subsequent years.

DURATION OF TRAINING

Total duration of training is 4 years, which is divided into 2 parts. Entry into the 2nd part is only possible after successful completion of the 1st part and the candidate passed the required assessment.

1st Part (1st & 2nd years) – In house training, preferably with rotation to different centers under different trainers. Part of this training can be done in local Universities.

2nd Part (3rd & 4th years) – The candidate works in partial independence and is supervised by his/her mentor from time to time. Part of this training can be done in recognized oversea centers, preferably during the 3rd year.

TRAINERS / MENTORS

Only accredited trainers can carry out full time training. Criteria for accreditation:-

Have at least 2 years of working experience in General Orthopaedics & Traumatology post gazettement plus

• At least 2 years of satisfactory working experience in the sub speciality after one year of formal post-sub speciality training. Proof of work experience desirable.

OR

• At least 5 years of satisfactory working experience actively involving the sub speciality at Specialist level (minimal of 7 years post gazettement). Aspiring trainers coming under this clause must be able to show proof of the results of their work.

OR

On a case to case basis, for those that do not come under the purview of the
above criterias, but has completed a certain period of training overseas or in local
Universities and has been actively involved in the sub speciality for a minimum
of 3 years and with a record of satisfactory working experience acceptable by the
OSSTC. Proof of result of work experience mandatory.

Trainers for short- term attachment, as in allied units, private sector or University Hospitals need not be accredited. The Orthopaedic Sub Specialist Training Committee reserves the right to appoint or revoke the appointment of trainers.

Trainer to trainee ratio

Maximum at any one time: 1 trainer for 1 trainee during 1st part of training and for 2 trainees during 2nd part of training (Maximum 1 trainer: 3 trainees)

All effort is made to maintain this ratio, but circumstances may dictate a change, depending on the number of trainers/trainees/ centers and the needs of the country.

In the event of a trainer with a trainee resigning from Government service, all attempts will be made to ensure that the affected trainee will be place under another trainer, which can sometimes be a transfer to another hospital. Such disruptions will however be dealt with amicably in the interest of all those concern.

Training Format

Training should be in the form of supervised apprenticeship and perceptorship with emphasis on one to one teaching from the mentor. Center based training rather than surgeon based training in view of the high turnover rate. There should be strong commitment to teaching of the fellow as judged by time allowed for didactic sessions, case presentations, journal reading, formal discussions, interest in clinical and basic research and studies / publications by fellows. The trainee should be provided with time and space for individual study and access to the relevant facilities.

TRAINING CENTERS

1st Part of training - in house training

Regional centers to be maintained as the hub of training because of their established supporting services; allied departments; and teaching facilities. Such centers also have a high patient volume turnover with a good yield of operative and non-operative cases. From here the trainees can be rotated and networked to other centers, attend short courses and attachments.

2nd Part of training – partial independence

In any General Hospitals or DGH with specialists which is able to support the sub speciality. Trainees can attend short courses and attachments. Trainers must visit and supervise / audit the trainee's work at least 4 times a year if not working in the same hospital. Part of this 2nd part training can be done in recognized oversea centers preferably during the 3rd year.

Overseas Training

To be undertaken preferably during the 3rd year of training. Application for scholarships, bursaries, paid leaves or other forms of aid to be done early. The respective sub specialty training committee will attempt to procure a suitable overseas training center for the trainee.

It should be noted here that this Fellowship is not tied to any form of Scholarship / Bursary / Paid Leaves or Sabbaticals. But the reverse applies, one has to be in the Fellowship to qualify for the scholarship.

However, every effort will still be made to obtain scholarships and other forms of financial support for the candidates to enable them to attend overseas training. Unfortunately, such scholarships are very limited; hence not all candidates will be successful in obtaining a scholarship for overseas training. Joining this Fellowship is not a guarantee to overseas training.

EVALUATION, SUPERVISION AND ASSESSMENT

- 1. Maintain a log book throughout the whole training period and complete it towards the end of training. The logbook is important for assessment.
- 2. There will be frequent supervision of the trainee's work during the 1st part of training. At least a quarterly audit of the trainee's work during the 2nd part of training.
- 3. At the end of the1st part of in house training there will be an assessment of the trainee's overall performance including a viva voce and discussion.. The supervisor can defer the candidate's appearance in the assessment exam to the next diet upon evidence submitted to the OSSTC that the candidate is not ready or prepared to be assessed. Only successful trainees can proceed into the 2nd part of training.
- 4. At the end of the 2nd part of training, there will be a thorough review into the trainee's work and the outcome of the patients treated. Assessors can interview and examine the trainee's patients, gain access and check at random the patient's records and also assess the trainee's maturity in management and technical skills.
- 5. Supervisor's report at the end of 1st & 2nd part of training. Overseas center supervisors report if applicable.
- 6. Trainees failing the 1st part assessment will be given a chance to **re-sit after 1 year**. **Failing in this re-sit will have the candidate terminated from the programme**. Those who have obtain overseas scholarship but failed in their assessment may have to defer / cancel their scholarship.
- 7. Trainees reaching towards the end of the 2nd part of training are expected to pass the final assessment. In the event of the trainees failing the 2nd part, the trainee will be **retrained for 6 months.** If the trainee fails again subsequently, he/she will be terminated from the programme and no certification will be given.

Appointment of Assessors / Examiners

The Orthopaedic Sub Specialist Committee can appoint assessors / examiners from:-

- 1. The Ministry of Health
- 2. Local Universities
- 3. Academy of Medicine, Malaysia
- 4. Malaysian Orthopaedic Association
- 5. Overseas

Academic Activities

The trainee is expected to be involve in academic activities like CME, teaching junior doctors / residents and conduct research. Also, for certification purposes, the trainee must have:-

- 1. 1 publication as first author in a peer review journal
- 2. Presented in meetings, seminars or conferences (2 oral & 2 posters)

Trainee's Commitment

The trainee must endeavour to complete the sub speciality training within the stipulated period with distinction. Upon completion of training, the trainee may be bonded to serve with the Government for a period of time that will be determined by The Ministry of Health and JPA. At present, there is no provision of such a bond unless the trainee goes for overseas training or other forms of training paid for by the Government.

Certification

After having satisfied all the requirements of the training programme, the trainee will be recommended to the Orthopaedic Sub Speciality Training Committee by their respective Sub Specialties and peers for the purpose of certification. The certificate of successful completion of sub specialty training will be issued by The Ministry of Health, Malaysia.

RE-CERTIFICATION

Successful candidates are subjected to re-certification every few years and their work audited according to the rules and regulations set up by the National Credentialing Committee.

General Rules And Regulations

- 1. Trainees may be required to help out in general on call duties during their training and also may be called upon to run the general wards on top of their subspeciality wards.
- 2. Trainees terminated from training by the Training Committee or stopping on their own for whatever reasons will not be accepted back into training and may have to serve out their bond with the Government.
- 3. The OSSTC reserves the right to change the rules and regulations from time to time without any prior notice or reasons given.

<u>Future areas of training</u>

Future areas of training may include Foot & Ankle Surgery; Shoulder & Elbow Surgery; Upper limb surgery, Surgery & treatment of Metabolic & Inflammatory Bone & Joint Disorders; Cervical Spine & Base of Skull Surgery; Orthopaedic Research; Rehabilitative Orthopaedics & Locomotor Assessment (Gait Analysis, Orthopaedic Biomechanics, Orthotics & Prosthetics).

OTHOPAEDIC SUB SPECIALITIES

Each sub specialty will have a committee, which have the following functions:-

- 1. To plan and map out the selected trainee's training programme for the whole duration of training.
- 2. To review and maintain the standards of training and to oversee all training aspects of their Sub Specialty.
- 3. To make necessary recommendations to the Orthopaedic Sub Specialty Training Committee in regards to training matters in their Sub Specialty.
- 4. Implementation of the programme according to its objectives and planning.

1. General Orthopaedics and Advance Musculoskeletal Traumatology

General Orthopaedics and musculoskeletal traumatology is recognized as a sub specialty because of the importance of the role of a generalist not only in our healthcare system but also in those of developed countries. Musculoskeletal Traumatology is included here because approximately 70 % of the workload of the Orthopaedic surgeon in MOH is due to trauma. A General Sub Specialist can contribute significantly in DGH with specialist as well as in General Hospitals.

General Orthopaedics and Advance Musculoskeletal Traumatology Training Committee

Programme Head: Dr. Thirumal

Deputy Head : Dr. Sivapasuntharam

Secretary : Dr. Abdul Rauf Bin Ahmad

Members : Dr. Thevarajan

Dr. Mohd Basir Bin Towil

Dr. Nahulan

Adviser : Assoc. Prof. Dr. Hassan Shukur

Accredited Centers for 1st Part of Training:

Main Centers:

- 1. Hospital Pulau Pinang
- 2. Hospital Ipoh
- 3. Hospital Kuala Lumpur
- 4. Hospital Tengku Ampuan Rahimah, Klang
- 5. Hospital Sultanah Aminah, JB
- 6. Hospital Umum Kuching

Affiliated Centers:- University Hospital, Hospital UKM, Hospital USM

Rotation to any of the following Hospitals:

- (1). Hospital Alor Setar (2). Hospital Seberang Jaya
- (3). Hospital Sg Buloh (4). Hospital Serdang (5). Hospital Selayang
- (6). Hospital Melaka (7). Hospital Seremban (8). Hospital Tengku Afzan, Kuantan
- (9). Hospital Kuala Trengganu (10). Hospital Kota Bharu (11). Hospital QE, KK

Training in the main centers will invariably expose the trainee to the many aspects of General Orthopaedics and Traumatology and for specialties not found in their center the trainee can rotate to the other centers that have the specialty. Whenever practical, the trainee is encouraged to rotate between centers to learn from different trainers. For example, main center HTAR – General Orthopaedics, Spine Trauma, Ilizarov and rotate to HKL for Pelvic Trauma, Vascular Trauma, Sport Injuries and to H. Selayang for Hand Trauma. The Committee will have to plan and map out the trainee's training programme from the beginning.

For the **2nd Part of training**, the trainee can be send to DGH with specialists, to run the Orthopaedic Department in such Hospitals under supervision from the trainer.

Training Contents

- 1. All aspects of musculoskeletal trauma management and care.
- 2. Spinal Trauma Anterior and posterior decompression and stabilization of the spine. Management of the spinal injured and paralysed patient.
- 3. Pelvic Trauma Stabilization of the pelvis, ext. or int. fixation. Management of acetabular fractures, Sacroiliac dislocations and sacral fractures.
- 4. Vascular Trauma Identification of limb arterial injuries. Direct repair, vein grafts or bypass grafts. (Rotate to Vascular Surgery Department)
- 5. Wound Management Flaps, rotational or free. (Rotate to Plastic Surgery Dept.)
- 6. Hand Trauma Management of hand injuries, fractures and the mangled hand.

- 7. Ilizarov Procedures For salvaging limbs, bone transport & lengthening, correction of deformities and fixation of fractures.
- 8. General Orthopaedics Exposure to Arthroplasty, Sports Injuries, Ortho. Oncology, Pediatric Ortho., Hand Surgery, Spine Surgery, Management of Diabetic Foot, Metabolic Diseases of Bone, Orthopaedic Rehabilitation and Prosthetics.

The trainee is encouraged to attend courses related to trauma like ATLS and those related to Mass Casualty Incidents.

2. SPINE SURGERY

Spine Surgery Training Committee

Programme Head: Dr. Mazwar Sofiyan
Deputy Head: Dr. Abdul Shukur Hashim
Secretary: Dr. Ahmad Tajuddin

Members : Dato Dr Ramanathan

Dr. Harwant Singh Dr. Zamyn Zuki Dr. K. Muthurathinam Dr. Fazir Mohammad Dr. B.C. Se To

Dr. Vivek

Adviser : Prof. Dato Dr. Mohammad Razak

Accredited Centers for 1st Part of Training:

Hospital Kuala Lumpur Hospital TAR, Klang.

Affiliated centers:- Hospital UKM, University Hospital

For rotation:-

- 1. Hospital Seremban 2. Hospital Sungai Buloh 3. Hospital Pulau Pinang.
- 4. Hospital Ipoh 5. Hospital Kuala Trengganu 6. Hospital Umum Kuching

Training Contents

- 1. Spinal Trauma
- 2. Degenerative disease of the spine
- 3. Deformities of the spine

- 4. Spinal infections
- 5. Spinal Tumours
- 6. Spinal Rehabilitation
- 7. Rotation to Neurosurgical Dept. Skull base procedures, Intradural pathologies.

5. Joint Arthroplasty

Joint Arthroplasty Training Committee

Programme Head: Dato Dr. Suresh Chopra

Deputy Head : Dr. Badrul Shah

Secretary: Dr. Mohd Kamal Hisa

Members : Dr. Fariz Kamaruddin

Dr. B. C. Se To Dr Ko Chung Yee Dr Ewe Teong Guan

Advisers: Prof. Dr. Masbah Omar

Assoc. Prof. Dr. David Choon

Accredited Centers for 1st Part of Training:

Rotation between:-

- 1. Hospital Kuala Lumpur
- 2. Hospital Pulau Pinang
- 3. Hospital Alor Setar
- 4. Hospital Melaka

Affiliated centers:- University Hospital, Hospital UKM

To be considered in the future; Hospital Tengku Afzan Kuantan, Hospital Umum Kuching, and Hospital Sultanah Aminah JB

Training Contents

- 1. Primary Total / Uni Arthroplasty & Hemiarthroplasty
- 2. Revision Arthroplasty
- 3. Osteotomy and Realignment Procedures
- 4. Arthroscopy, imaging, histology & pathology of joint replacement
- 5. Minimal invasive arthroplasty
- 6. Infection in arthroplasty & thromboembolic disease
- 7. Bone grafting procedures

- 8. Treatment of peri-prosthetic fractures
- 9. Materials for joint replacement
- 10. Joint reconstruction after tumour resection
- 11. Arthrodesis for failed joint replacement

5. Hand And Microsurgery

Hand And Microsurgery Training Committee

Programme Head & Advisor: Dr. Pathmanathan

Members: Dr. Razana

Dr. Kamil Dr. David Teh

Advisers : Prof. Dato Dr Tunku Sara

Dr. Mohd. Iskandar

Dr. Rohit

Accredited Centers for 1st Part of Training:

Hospital Selayang

Affiliated centers:- University Hospital, HUKM, HUSM

At present, the training in Hand and Microsurgery is only 6 months in Hospital Selayang. Further training following that is still under discussion.

The proposed training contents are as follows:-

Training Contents

1st Year Training

Injury of the hand and Distal Upper limb

Skin- techniques of skin cover

Tendon- management of flexor and extensor tendon injury- primary techniques and secondary techniques e.g. graft, transfer, tenolysis.

Nerve- management of injury- primary and secondary procedure, microsurgical techniques including Brachial plexus injury.

Vessel- management of arterial injuries, **microsurgical techniques**, compartment syndrome and ischaemic hands.

Bone- management of hand bone fractures, wrist injuries, use of fixation-external and internal, splint and cast and secondary management of complicated fractures

.

Ligaments- management of injuries, acute and chronic ligament injuries of the wrist with primary and secondary procedures. Arthroscopic surgery of the wrist. **Amputation- replantation and revascularization**, reconstructions following the amputation for prosthesis and orthoses, **thumb and digits reconstruction.**

Special Injuries- thermal injuries, pressure and injection injuries, degloving injuries, radiation and thermal injuries, vibration injuries.

2nd Year Training

Elective Surgery of the Hand and Upper Limb

Congenital- Management of complex congenital hand deformity, techniques used in management of congenital anomalies.

Paralyses- principle in management of cerebral palsy and other spastic paralyses, **reconstruction of paralytic hand deformity**, tetraplagia, poliomyelitis, **reconstruction for peripheral nerve injuries.**

Arthritis- general principle in management of arthritis in hand and upper limb, rheumatoid arthritis, osteoarthritis including **arthrodesis and arthroplasty**.

Nerve Compression Syndrome- management of compression syndrome median, ulnar, radial nerve and thoracic outlet syndrome.

Tumor-principle of soft tissue and bone tumor management

Infection-general principle, prevention and use of antibiotics, wound infection and deep sepsis.

Connective tissue Disorders- stenosing syndromes, Dupuytren's contracture, ischaemic condition.

Pain syndrome in the upper limb.

Sport Injuries in the Upper Limb.

5. Sports Injuries and Arthroscopy

Sports Injuries and Arthroscopy Training Committee

Programme Head: Dr. Wan Hazmy Che HonDeputy Head: Dr. Mohd Asri Abd Ghapar

Secretary: Dr. Lee Woo Guan

Accredited Centers for 1st Part of Training:

1. Hospital Seremban

- 2. Hospital Kuala Lumpur
- 3. Hospital Umum Kuching

Affiliated Centers: - University Hospital, Hospital Tentera Lumut

Training Contents

- 1. Arthrosopic reconstructive procedures of the knee, shoulder and other joints.
- 2. Non arthroscopic reconstructive procedures
- 3. Management of sports injuries
- 4. Sports medicine and sports physiology
- 5. Rehabilitation in sports injury

6. Pediatric Orthopaedics

Pediatric Orthopaedics Training Committee

Programme Head: Dr. Ramli Baba **Deputy Head:** Dr. Zulkiflee Osman

Secretary: Dr Yaacob

Advisers: Prof. Dr. S. Sengupta

Prof. Dr. Sharaf

Assoc. Prof Dr. Saw Aik

Accredited Centers for 1st Part of Training:

Hospital Kuala Lumpur

Future centers: - Hospital Selayang, Hospital Kota Bharu

Affiliated centers: - University Hospital, HUKM

Training Contents

- 1. Embryology
- 2. Bone Dysplasias (Dwarfs)
- 3. Chromosomal and teratologic disorders
- 4. Haematopoietic Disorders
- 5. Athritides
- 6. Metabolic diseases
- 7. Birth injuries
- 8. Cerebral palsy
- 9. Neurofibromatosis
- 10. Neuromuscular disorders
- 11. Pediatric Spine
- 12. Upper extremity disorders
- 13. Rotational & angular deformities of the lower limbs
- 14. Hip DDH, SUFE, Perthes
- 15. Pediatric knee
- 16. Proximal focal femoral deficiency
- 17. Gait abnormalities
- 18. Infections
- 19. Leg length inequality
- 20. Pediatric foot, CTEV, Flatfoot, Pes Cavus
- 21. Pediatric trauma

7. Orthopaedic Oncology

Orthopaedic Oncology Training Committee

Programme Head: Dr. Anwar Hau Abdullah

Members: Dr. Vivek Ajit Singh

Dr. Chai Dr. Saadon

Advisers: Prof. Dr. Zulmi Wan

Prof. Dr. Pan Kok Leong

Accredited Centers for 1st Part of Training:

Important deciding factors are present of supporting facilities such as:

- MRI
- Oncologist (medical and radiation)
- Radionuclid scan facility
- Bone and tissue bank (preferably)
- 1. Hospital Kota Bharu with networking to HUSM

Proposed: -

- 1. Hospital Kuala Lumpur 2. Ho
 - 2. Hospital Pandan, Johor
- 3. Hospital Pulau Pinang
- 4. Hospital Umum Kuching Sarawak

Affiliated Centers: - HUSM, University Hospital

Training Contents

First year:

- Principles of surgical oncology
- Principles of biopsy
- Oncology attachment- medical and radiotherapy (1 month)
- Musculoskeletal imaging attachment (1 month)
- Basic musculoskeletal tumour pathology attachment (1 month)
- Benign and malignant musculoskeletal (bone and soft tissue) tumours and their management
- Principles of soft tissue coverage
- Principles of arthroplasty (1 month attachment in arthroplasty unit) optional.
- Rehabilitation
- Psychology in cancer patients
- Counseling in cancer patients
- Cancer pain management

Procedures allowed:

- Biopsy of bone and soft tissue tumours
- Excision of benign soft tissue tumours
- Benign bone tumour surgical procedures
- Assist in malignant bone and soft tissue tumour surgery

Second year:

- Advance/complex oncology resection and reconstruction procedures in various anatomical regions (including spine- with spine surgeon)
- Management of surgical oncology complications
- Management of chemotherapy complications
- Management of radiation complications
- Revision procedures in fail oncology reconstructive surgery
- Principles of oncology amputation
- Management of local recurrence
- Management of skeletal metastasis (including spine)

Procedures allowed:

- Excision of malignant bone and soft tissue tumours
- Reconstructive surgery
- Excision and reconstruction in skeletal metastasis
- Amputation in oncology patients
- Revision surgery

APPENDIX A

Competency Assessment

Competency assessment will be continuous throughout the training programme by the trainee's supervisor. Second year-end and fourth year-end assessment will consist of viva voce, discussions and audit of the candidates work relevant to the subspecialty. Parameters of "surgical competence" like knowledge, decision-making, communication, psychology, technical ability and dexterity will be assessed. The candidate is expected to know the latest / current knowledge in their field and also be able to discuss controversial issues with the backing of evidence based knowledge.

APPENDIX B

Supervisor's Report

The supervisor's report is an open report and must consist of the following: -

- 1. The candidates attitude and character
- 2. Punctuality
- 3. Knowledge
- 4. Patient management and decision making
- 5. Technical ability and dexterity
- 6. Conduct and communication skills
- 7. Professionalism and ethics
- 8. Continuing medical education and academic activities
- 9. Organisation and leadership skills
- 10. Ability to get along with others / teamwork

APPENDIX C

Log Book

A logbook must be maintained at all times during training for all procedures done. It should consists of the patient's name, I/C number, R/N, date of procedure, duration, type of procedure, status- assisting, carried out under supervision or independently, any complications / difficulty encountered and relevant remarks. **The supervisor must attest all procedures done.**

B C Se To 2004