

RHEUMATOLOGY SUBSPECIALTY TRAINING AND ACCREDITATION

A. INTRODUCTION

Rheumatology deals with inflammatory disorders like rheumatoid arthritis, spondyloarthropathies and crystal arthritis, immunological conditions like systemic lupus erythematosus (SLE), polyarteritis nodosa, systemic vasculitis, mechanical disorders like soft tissue rheumatism, back pain, osteoarthritis, as well as metabolic disorders like osteoporosis. It is hoped that by developing a programme for specialty training, the gap between patient need and specialist care can be narrowed.

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1. Objective

To produce rheumatologists who are competent to manage all forms of rheumatological diseases and their associated complications.

2. Entry requirements

- i. Post graduate qualification: MRCP (UK or Ireland), M Med (Int Med) or any other equivalent degree recognized by the Malaysian government, post-gazettement
- ii. Good references with good ability to deal with patients and staff.

3. Duration of programme

- Three years
 - a) Of which two years will be at a local accredited training centre and preferably one year abroad in an approved centre.
 - b) 3 years at local accredited centre but rotate in at least 2 centres. (The second center for at least 6 months in total)
 - c) Yearly evaluation by the trainer

4. Content of Training programme

It is expected that completion of the curriculum will result in demonstrable competence at consultant level in the following areas (see over Appendix A)

The content of the training programme will be reviewed as and when the need arises.

a. Training post

Criteria for accreditation of training centres, trainers (qualifications and experience)

b. Facilities and resources of a training centre in rheumatology

1. Recognized expertise in rheumatology
2. Comprehensive in-patient care for patients with complex rheumatological disorders and complications.
3. Easy access and availability of other related disciplines, which may need referral to, namely, physiotherapy, occupational therapy, nephrology, orthopaedics, hand and microsurgery, neurology, haematology and dermatology as rheumatological diseases may be multisystemic.
4. Laboratory facilities for specialized serological immunological, including other laboratory facilities should be available.
5. Well equipped radiological services providing diagnostic and if possible interventional radiological services
6. Intensive care facilities for patients with complicated rheumatological diseases

c. Others

1. A well equipped library
2. Sufficient seminar and conference facilities
3. Adequate access to computers and CD-Rom, internet facilities.

d. Programme Faculty

Trainers must have sufficient experience (at least two years) and recognized expertise in the management of rheumatological diseases and have provided expert consultation in rheumatological diseases for the same period of time. It is expected that the trainer should spend at least 60% of his/her time in rheumatology.

e. Responsibility of Trainers

1. Training ratio: 1 trainer to 2 trainees
2. Ensure contents of the training programme are successfully completed by trainees
3. Supervise relevant aspects of training programmes
4. Ability to provide overall assessment and evaluation reports on the performance of trainees at the end of the training period.
5. Work closely with other consultants in the training programme to ensure smooth running of the programme as the trainee may do attachments in other hospitals.

f. Training centres

1. Hospital Selayang

2. Hospital [Tuanku Ja'afar, Seremban](#)
3. Hospital [Putrajaya](#)
4. Hospital [Penang](#)
5. [Hospital Tuanku Bainun Ipoh](#)
6. [Hospital Umum Sarawak](#)
7. [Hospital Sultanah Nur Zahirah, Kuala Terengganu](#)

g. Teaching Hospital with rheumatologist/s

- i) UMMC

h. Assessment

It is expected that the trainers and training facilities be subjected to periodic reviews by a body consisting of members from the faculty, MSR, the [M](#)inistry of [H](#)ealth and the [C](#)ollege of [P](#)hysicians who comprise the elements of representation of the credentialing committee for rheumatology.

B. CURRICULUM FOR HIGHER SPECIALIST TRAINING IN RHEUMATOLOGY

It is expected that completion of the curriculum will result in demonstrable competence at consultant level in the following areas:

1. GENERAL KNOWLEDGE

a. Clinical contact with the patients (inpatient and outpatient)

This will require the trainee to be able to take a history and perform a clinical examination of a patient with a musculoskeletal disorder to include special details and methods outlined in the training record. This should include ward rounds, clinics seeing new and follow up patients and also seeing referral cases. The trainees should develop confidence and competence in forming management plans for patients under their care.

b. Assessment of multi system diseases

This will require good knowledge of the haematological changes, acute phase reactants and biochemical changes that accompany the rheumatic diseases. It will also require knowledge of the immunological basis and methodology in investigations of the autoimmune diseases.

c. Selection of appropriate laboratory and radiological tests

This will require knowledge of the place of these investigations in diagnosis, following the progression of disease and for assessing the extent of damage in individual joint or other structures in the locomotor and immune system. Trainees must be trained and knowledgeable in the reading and interpretation of musculoskeletal x-rays and other imaging techniques including MRI scans.

d. Understand the role of neurophysiology in the investigation of rheumatic diseases

This will require knowledge of the place of nerve conduction studies, electromyography, electroencephalography and other relevant tests in the investigation of neuropathies and myopathies.

e. Knowledge of rheumatic diseases

This will require a thorough theoretical knowledge of the rheumatic diseases (Appendix A). It will include knowledge of the epidemiology, aetiology, pathogenesis, pathology, clinical features and management of these diseases. Journal reading should emphasise clinical appraisal and systematic review.

f. Rheumatological clinical meetings

Participation at rheumatology monthly meetings where case presentations will be held between various hospitals

g. Demonstrate experience of the rheumatic diseases through the age spectrum

The spread of rheumatic patients is wide, from paediatric to geriatric age groups. It is envisaged that this experience could be obtained over three years by contact with appropriate patients or by attendance at paediatric/ rheumatology clinics or specific courses.

h. Rheumatological and patient emergencies

They are expected to gain experience with rheumatological emergencies and emergency care for patients (see appendix B).

i. Understand the pharmacology of drugs used in the rheumatic diseases

This will require knowledge of non-steroidal anti-inflammatory drugs, [non-biologic and biologic](#) disease modifying agents, cytotoxic drugs and steroids, analgesics, psychotropics, gastro protective drugs and drugs used in the treatment of osteoporosis and gout. A thorough understanding of the adverse effects of medications, their effect on the patient, interactions with other medications as well as their effects during pregnancy and to the foetus is fundamental.

j. Understand the role of the allied professions in the management of rheumatic diseases

This will require an understanding of the methods used by occupational and physiotherapists in rehabilitation of patients with rheumatic diseases. It will include knowledge of the community and social consequences of these diseases and the management of mobility (driving, wheelchairs, orthotics, and special seating) The concept of disability and handicap must be understood as well as the impact of the disease on the patient and the community.

k. Understand the role of allied specialties (Orthopaedics, anaesthetics and Plastic surgery etc

Understand the role of allied specialties by attending clinics in other specialties.

l. Appreciate the role of patient education and staff management in the rheumatic diseases

This will require knowledge of the wide field of patient education required in the rheumatic diseases and the concept of the team approach to patient management.

m. Understand the social and legal aspects of the rheumatic diseases

This will require direct contact with the medical social worker and other groups involved in working with disabled people.

n. Information technology

Ability to access information via the internet and to keep abreast of the latest data in evidence based medicine

2. SPECIAL SKILLS

a. Joint injection skills

The trainee will be required to demonstrate competence at aspirating and injecting the MCP, PIP, elbow, wrist, shoulder, knee, subtalar, ankle and acromioclavicular joints. The trainee will be expected to recognize the macroscopic appearance of noninflammatory, inflammatory, haemorrhagic and septic synovial fluid and be able to detect crystals by polarized light microscopy.

b. Perform soft tissue injections

The trainee will be required to demonstrate competence at injecting tennis/golfer's elbow, carpal tunnels, tenosynovitis/flexor tendon nodules, bursitis, tendonitis and plantar fasciitis.

c. Appreciate and develop counseling and communication skills

Special emphasis will have to be given to this important area. Patients with rheumatic diseases are often afflicted with this illness when they are relatively young and they are often incurable. It is expected that this will be an ongoing acquisition throughout higher medical training. It should culminate in the ability to counsel patients, relatives and staff in the many varied situations in clinical rheumatology.

d. Appreciate the value of audit methodology/specific outcome measures.

The training will be expected to attend and have some experience at organized local/regional audit meetings and acquire knowledge of specific outcome measures relevant to the rheumatic diseases.

e. Teaching experience

The trainee should be able to demonstrate the ability to teach medical and paramedical staff by experience and conduct specific courses if necessary.

f. Develop research experience (Clinical paper)

This will include training in the analysis of data and an understanding of the principles and practice of clinical research. The trainee should eventually be able to promote and supervise research and complete a successful research project and/or clinical paper. Making presentations at local and international scientific meetings should be encouraged. Methodology in performing quality assurance (QA) studies should be taught.

3. LOGBOOK

In the determination of the trainees competence and experience, a logbook will be kept and endorsed/checked by the designated supervisor at regular intervals. The logbook will be a basis for assessment at the end of each year and at the end of the period of subspecialty training.

4. EXIT VIVA

The trainee will have to pass an exit viva, the format of which will be set and conducted by the MSR credentialing committee.

5. Appendix A

a. Regional Pain Syndromes and soft tissue rheumatism

Neck pain
Low back pain
Spinal stenosis
Whiplash injury
Pain in the shoulder, elbow, hand, knee, ankle
Shoulder/hand syndrome
Chest wall pain
Myofascial pain
Algodystrophy,
Soft tissue; plantar fasciitis, bursitis, tennis elbow etc
Fibromyalgia
Hypermobility syndrome
Understanding chronic pain syndromes
Understanding referred pain and related conditions (e.g. sciatica, angina etc)

b. Osteoarthritis and related conditions

Osteoarthritis of the large joints
Generalized OA
DISH, neuropathic arthritis
Crystal arthropathy- gout, pseudogout. Apatite dep. disease
Endocrine (including cheiroarthropathy) and haemoglobinopathies
Acromegaly
Bone and joint abnormalities in thyroid disease

c. Rheumatoid arthritis

Early progressive and late disease
Systemic involvement
 Vasculitis
 Chest, eye, neurological, cervical myelopathy
Complications of RA
 Septic arthritis
 Ruptured Baker's cyst
 Amyloid
 Tendon rupture
 Secondary OA and joint deformity

d. Juvenile chronic arthritis

Clinical features
Management
Adult onset Still's

e. Spondyloarthropathies

Ankylosing Spondylitis
Psoriatic arthritis
Enteropathic arthritides
Reactive arthritis
Reiter's syndrome
Whipple's

f. Autoimmune rheumatic conditions

Systemic Lupus Erythematosus
Antiphospholipid syndrome
Systemic Sclerosis
Sjogren's syndrome
Overlap syndromes
Inflammatory muscle disease
| Vasculitides
 Polyarteritis nodosa
 Polymyalgia rheumatica and giant cell arteritis
| Wegener's granulomatosis
 Churg-Strauss syndrome
| Panniculitis
 Cutaneous vasculitis
 Behcet's
Vasculitis in children (Henoch-Schonlein purpura, Kawasaki syndrome)

g. Metabolic bone diseases

- Osteoporosis
- Rickets and osteomalacia
- Renal bone disease
- Regional bone disorders
 - Algodystrophy
 - Paget's disease
 - HPOA
 - Osteonecrosis
 - Perthe's disease
 - Tumours of bone
 - Heritable collagen disorders eg Marfan's, Ehler Danlos
 - Bone and joint dysplasias

h. Infection and arthritis

- Septic bone and joint lesions
- Lyme Disease
- Mycobacterial, fungal and parasitic arthropathies
- Viral arthritis
- Acquired immune deficiency syndrome
- Rheumatic fever and other strep. related arthritides

i. Miscellaneous disorders

- Sarcoidosis
- Eosinophilic fasciitis and eosinophilic myalgia syndrome
- Familial Mediterranean fever
- Relapsing polychondritis
- Hypogammaglobinaemia and arthritis
- Storage diseases

6. Appendix B

(This list of rheumatological emergencies is not meant to be exhaustive. Trainees are expected to be familiar with the diagnosis and management of the common medical emergencies but the list below details some of the more important emergencies specific to rheumatology)

a. Rheumatological emergencies

1. Systemic vasculitis
2. SLE flare (neuropsychiatric, renal, lung etc)
3. Acute cord compression
4. Septic arthritis
5. Catastrophic Antiphospholipid syndrome
6. Sepsis in neutropaenic/immunocompromised patient
7. Corneal melt
8. Giant cell arteritis and acute optic artery occlusion
9. Severe digital ischaemia
10. Acute interstitial fibrosis and pneumonitis due to drug reaction, sepsis or disease
11. Acute scleroderma crisis
12. Accidental conception in presence of teratogenic drug (this may not constitute a life threatening emergency but the handling of this difficult situation is important)
13. Major and multi-organ failure in systemic disease including DIVC

Members of this standing committee were

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