

**New Publication by HKU
Paediatricians
'Childhood Rheumatic Diseases 3 – The
Paediatric Diseases You Must Learn'**



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What are Childhood Rheumatic Diseases?

- Childhood rheumatic diseases
 - immunological disorders
 - autoimmune disorders
 - leading to inflammatory damage
- It is a disease category, which includes over 100 diseases



Childhood Rheumatic Diseases

Acute

- Kawasaki Disease
- Henoch-Schönlein purpura
- Reiter's Syndrome
- Acute Rheumatic Fever
- Post-Streptococcal Reactive arthritis

Chronic

- SLE
- Juvenile Idiopathic Arthritis (JIA)
- Juvenile Dermatomyositis
- Scleroderma
- Childhood Vasculitis Syndrome
 - Polyarteritis Nodosa
 - Takayasu Arteritis
 - Wegener's Granulomatosis
 - Other vasculitis syndromes
- Behcet's disease
- Fibromyalgia
- Hereditray
 - Familial Mediterranean fever syndrome
 - CINCA Syndrome



Why so many types?

Different autoimmune disorders will attack different parts of the body or organs, leading to different symptoms:

Musculoskeletal

- bone
- joint
- connective tissue
 - ligaments
 - muscle

Other body tissues or organs

- skin
- eyes
- oral cavity
- heart
- brain
- kidney
- lung.....etc



Age of Onset of Childhood Rheumatic Diseases

From newborn to adolescents (<age 18)



Trends of Childhood Rheumatic Diseases

Using Juvenile Idiopathic Arthritis (JIA) as an example

- From 1988 to 2000, for about 12 years, there were 45 cases in Queen Mary Hospital
- From 2000 to first half of 2010, for about 10 years, there are about 93 cases
- Possible reasons for the dramatic increase
 - The incidents of JIA is increasing in HK
 - More referrals are received



Common Childhood Rheumatic Diseases

- Juvenile Idiopathic Arthritis (JIA)
- Juvenile Dermatomyositis
- Lupus Erythematosus (SLE)
- Others (e.g. Kawasaki Disease, Henoch-Schönlein purpura, Scleroderma, Raynaud's Phenomenon, Linear Scleroderma, Psoriasis)



1. Juvenile Idiopathic Arthritis (JIA)

It damages the joints, leading to disability.

If Systemic-onset JIA (one of the seven types of JIA) lacks control, it will lead to:

1. Pleural effusion, Pericardial effusion
2. Hepatomegaly, splenomegaly, lymphadenopathy
3. Decrease in number of blood cell
4. Affect the function of bone marrow
5. Threaten patients' life



1. Juvenile Idiopathic Arthritis (JIA)



1. Juvenile Idiopathic Arthritis (JIA)



**swollen
left knee**



1. Juvenile Idiopathic Arthritis (JIA)



1. Juvenile Idiopathic Arthritis (JIA)





1. Juvenile Idiopathic Arthritis (JIA)

Finger joints are swollen and deformed, affecting daily life

Joints are swollen and painful, stiff in the morning



1. Juvenile Idiopathic Arthritis (JIA)

Psoriatic Arthritis





2. Juvenile Dermatomyositis

- Damage skin and muscle
- Sometimes damage intestinal vasculitis
- Affect breathing muscle when the disease getting serious
- Affect muscle for swallowing, leading to aspiration pneumonia and choking



2. Juvenile Dermatomyositis





3. Lupus Erythematosus (SLE)

- Attack skin and any other organs
- For severe cases, it will attack brain and kidney, threatening patient's life



3. Lupus Erythematosus (SLE)

Oral Ulcer





3. Lupus Erythematosus (SLE)

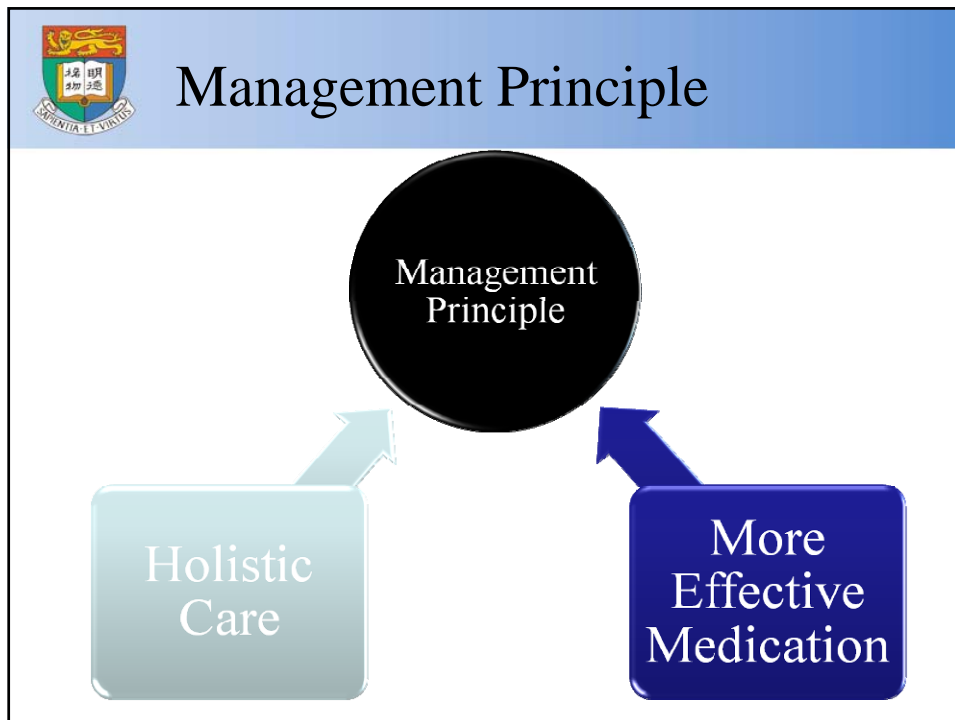


Vasculitis



4. Other Rheumatic Diseases

- Kawasaki's disease
- Henoch-Schönlein purpura
- Scleroderma
- Raynaud's Phenomenon
- Linear Scleroderma
- Psoriasis



Treatment: three categories of drugs

1. Anti-Inflammatory Drugs
 - to reduce the symptoms and pain for mild cases
2. Steroid
 - commonly used to control inflammation
3. Immunomodulatory Medications
 - includes DMARDs and biologics



Immunomodulatory Medications can be further subdivided into two categories:

1. DMARDs

- MTX, Azathioprine, Cyclosporine and MMF
- helps to slow down disease progression and reduces the rate of damage to bone and cartilage

2. Biologics

- for severe cases that cannot be treated by traditional drugs
- produced through genetic engineering, reduces inflammation and damages to joints
- may give rise to side effects such as infection and malignancy
- should be prescribed by paediatric rheumatologist



'The Paediatric Diseases You Must Learn' Series by HKU





Aims of “Childhood Rheumatic Diseases”

Four symptoms for Childhood Rheumatic Diseases

1. Joint pain or swollen joints
2. Muscle weakness
3. Rash
4. Fever

Parents should not hesitate to consult the doctor if symptoms are observed in their children



Aims of “Childhood Rheumatic Diseases”

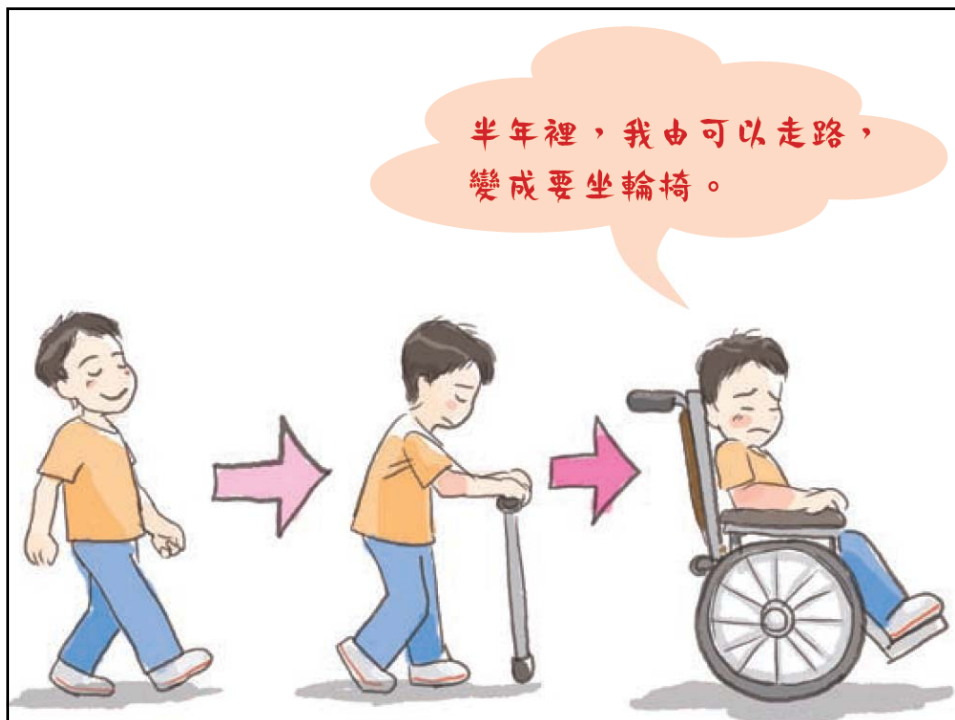
Without timely treatment, devastating consequences to the children :

- destructions to joints, causing disabilities
- Damaging skins and muscles
- severe and long-term damages to the children’s physical functions, giving rise to blindness and mental retardation
- death



Serious Sequelae & Complications

- Affect different organs, leading to failure
- Affect children's growth and learning
- Affect children's working and living ability when after they grown up





Total Hip Joint Replacement for end-stage symptomatic osteoarthritis



Hong Kong Paediatric Rheumatism Association

A support group for patients and parents

e-mail: mail@hkpra.org



About the “Childhood Rheumatic Diseases”

- on shelf during the ‘2010 Hong Kong Book Fair’ starting from July 21
 - priced at HKD\$65 each.
 - During the Book Fair, a free-of-charge seminar will be held. Details are listed as follows:
 - Speaker: Professor LAU Yu-lung
 - Date: July 25, 2010 (Sunday)
 - Time: 16:00 -17:30
 - Venue: S427, HKCEC
 - Vacancies: 100
- For application, please visit the link:



<https://spreadsheets.google.com/viewform?formkey=dHVvY2JYUkl2enlMSnRxV2dKTnB3bEE6MQ>



Q&A Session