JIA是什么?

幼年特发性关节炎(JIA)用来描述各种未满16岁的儿童慢性关节炎。其它形容JIA的还有幼年型慢性关节炎或幼年类风湿关节炎。

这是一种免疫系统的疾病，影响身体多个关节，引起关节疼痛，僵硬及肿胀。

JIA的关节会有什么改变?

人体免疫系统(对抗体外细菌、病毒和体内病变细胞)开始攻击自己的身体，“误伤”关节及其周围组织引起发炎。关节在免疫系统持续性的攻击之下最终受损。炎症、疼痛和关节僵硬的程度会随着病情越加严重，最终导致关节变形及整体活动性丧失。

科学家推论病发原因是身体受未知的病毒感染，触发其过度反应令免疫系统紊乱。被激发的免疫系统针对性攻击人体自身的细胞，因此称为“自身免疫性疾病”。

在幼年型关节的患者中，覆盖关节的滑膜成为免疫系统的攻击目标，骨骼和关节软骨受破坏。关节内液体增加及关节囊增厚，引致关节肿胀和压痛。

谁会患上此疾病?

任何孩子都有可能患上关节炎。顾名思义，JIA的症状会在16岁前出现。

JIA有什么风险因素?

如其它自身免疫性疾病，JIA与异常免疫反应相关的遗传因素有关连。家族中有其他成员患有JIA和/或其它自身免疫性疾病是一项高危因素，但却不能因而可估计其它家族成员患上JIA的风险。

JIA有什么症状?

JIA的症状包括持续最少6周的关节疼痛，肿胀，压痛，温热和僵硬。关节僵硬的情况于早上及休息后最为严重。JIA最常影响膝盖和手脚关节。

除关节症状，全身型JIA患者会出现高烧和皮疹，症状会很快出现或消失。

眼睛发炎是一项出现于JIA儿童患者的潜在性严重病发症，因此患者需要定期接受眼睛检查。

一般情况下，JIA的症状会反复交替，时好(缓和)或时坏(复发)。

怎样诊断JIA?

诊断JIA是透过详细的病史记录和身体检查，以寻找关节发炎的征象。没有一个单一的测试可以用来诊断或确认JIA。医生可以透过以下测试诊断:

- 化验 – 血液测试以评估炎症程度(C–反应蛋白，红细胞沉降率，全血计数)，抗体(例如抗可核抗体，类风湿因子)，肌酶等有助于区分不同类型的JIA。
- X–光或MRI扫描可能会侦测到不寻常的骨软组织的发展和变化。

怎样治疗JIA?

暂时没有根治的方法。但是有不同的治疗策略可以减轻症状，防止关节进一步受损，重新锻炼肌力和活动能力。

a. 药物

NSAIDs (非类固醇抗炎药)例如布洛芬，萘普生，双氯酚酸及吲哚美辛等，均是经常被用作镇痛、消炎及舒缓僵硬的JIA处方药物。然而，这些药物对疾病的进展没有长远影响。可是对JIA儿童患者的症状有一定的舒缓作用。

根据疾病的严重程度及进展，医生一般都会处方DMARDs(病症缓解性抗风湿药物)。这些药物包括甲氨蝶呤及柳氮磺吡啶。这些类药物既安全亦可减慢JIA的进展，但是可能需要等待数周或数月以达到充分的治疗效果。

在等待过程中，医生亦有可能会处方低剂量的类固醇。有时候，直接地将类固醇注射入关节亦可舒缓疼痛和肿胀。

另有一批称为“生物制剂”(Biologics)的药物亦可以迅速和有效地控制JIA。生物制剂为注射药物，价格昂贵。医生会判断这种药物是否适合你使用。

b. 运动

一旦炎症在控制之下，便应重建在关节炎影响下而变弱的韧带和肌肉能力。运动能帮助锻炼肌肉力量，稳定关节及重建活动能力。物理治疗师会为您提供适合的运动建议。夹板和其它装备均有一定帮助。我们应该鼓励孩子多活动及保持健康。在症状受控制的情况下，大多数JIA儿童患者仍可如常进行一般的体力活动和特定的运动。在复发期间，有必要根据活动所涉及的关节而作相当的活动限制。急性肿胀和疼痛的关节应多作休息。当复发期结束后，孩子可以再次开始正常活动。游泳可减轻关节的负荷，因此是一项对关节有益的活动。

c. 另类疗法

虽然少有关於另类疗法的研究，有些人似乎从如特殊饮食，补充剂，针灸，按摩等中受益。如果你正在使用另类疗法，请告知你的医生。

JIA有什么病发症?

JIA有时可影响眼睛和引起炎症，称为葡萄膜炎。JIA儿童患者应定期接受眼科检查。

我可以防止JIA吗?

由JIA造成的残疾是可以透过早期诊断和治疗预防。健康均衡的饮食和定期运动也很有帮助。

家人如何帮助患有幼年型关节炎孩子过美好的生活?

家人可以从身体和情感上帮助孩子的几件事情:

- 给予最好的照顾
- 如常地对待孩子
- 了解你的孩子的疾病及其治疗
- 坚持孩子接受治疗
- 鼓励孩子运动和接受物理治疗
- 参与治疗师和医护人员照顾孩子的工作

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Juvenile Idiopathic Arthritis
幼年特发性关节炎

www.naf.org.sg

What is Juvenile Idiopathic Arthritis?

Juvenile Idiopathic Arthritis (**JIA**) is the term used to describe various types of chronic arthritis in children under the age of 16 years. Other terms used to describe **JIA** are *Juvenile Chronic Arthritis* or *Juvenile Rheumatoid Arthritis*.

This is a disease of the immune system that affects multiple joints in the body, causing pain, stiffness and swelling in the affected joints.

What happens to the joints in Juvenile Idiopathic Arthritis?

The body's immune system normally takes care of fighting foreign bacteria, viruses and diseased cells in the body. In **JIA**, the immune system engages in '***Friendly Fire***,' attacking the joints and their surrounding tissues, which become inflamed. The continual attack by the immune system, which lacks an '***off switch***,' causes damage to the joints over time. As the condition progresses, the inflammation, pain and stiffness of the joints tend to increase in severity, ultimately leading to deformity of joints and loss of overall mobility.

Scientists theorise that either a disorder in the body's immune system or an over-reaction to a trigger like a viral infection can set off the condition. Once mobilized, the immune system targets the body's own cells – hence the term '***Autoimmune Disease***.'

In the case of Juvenile Arthritis, the synovial membrane that covers the joints becomes the target of the immune system's attack which leads to destruction of the bone and cartilage of the joint. The swelling and tenderness is due to increased fluid in the joint and the thickening of the joint capsule.

Who gets affected?

Any child can get affected by arthritis. By definition, the symptoms of JIA start before the 16th birthday.

What are the risk factors for Juvenile Idiopathic Arthritis?

Like other autoimmune diseases, **JIA** is linked to genetic factors associated with an abnormal immune response. A family history of **JIA** and / or other autoimmune diseases is a risk factor but there is no precise way of predicting how high the risk is if there is another affected member in the family.

What are the symptoms of Juvenile Idiopathic Arthritis?

Symptoms of **JIA** include joint pain, swelling, tenderness, warmth and stiffness that last for more than 6 continuous weeks. Stiffness is typically worse in the morning or after a nap. **JIA** commonly affects the knees and the joints in the hands and feet.

A small group of children with Juvenile Arthritis have a systemic form of the disease that is characterized by fever and rash in addition to arthritis. The rash and fever may appear and disappear very quickly and may appear before the joint symptoms.

Typically, there are periods when the symptoms of **JIA** are better or disappear ***(Remissions)*** and times when symptoms get worse ***(Flares)***.

How is Juvenile Idiopathic Arthritis diagnosed?

The diagnosis of JIA is best made by taking a detailed history and doing a physical examination to look for signs of joint inflammation. No single test can be used to diagnose or confirm JIA. Your doctor may perform the following tests nonetheless:

- **Laboratory Tests** – Blood tests to assess the degree of inflammation (C-reactive protein, ESR, full blood count), presence of antibodies (e.g. anti-nuclear antibody, Rheumatoid Factor), muscle enzymes, and help to differentiate among the different types of **JIA**.
- **X Rays or MRI Scans** – may detect unusual bone development and changes in soft tissue.

What is the treatment for Juvenile Idiopathic Arthritis?

There is no cure for **JIA**. However, there are various treatment strategies to alleviate symptoms, prevent further joint destruction and regain lost muscle strength and mobility.

a. Medication

NSAIDs *(**N**on-**S**teroidal **A**nti-inflammatory **D**rugs)* like Ibuprofen, Naproxen, Diclofenac ***(Voltaren)*** and Indomethacin are often prescribed to reduce pain, swelling and stiffness in **JIA**. However, these drugs will have no long-term effect on the progression of the disease. They are still important to enable children with **JIA** to feel comfortable.

Depending on the severity and progression of the condition, **DMARDs** *(**D**isease-**M**odifying **A**nti-**R**heumatic **D**rugs)* are often prescribed. These include Methotrexate and Sulphasalazine. Such drugs are safe and slow the progression of **JIA** but may take weeks or months to reach their full effect.

Low dose Steroids are occasionally used while waiting for the DMARDs to take effect. Sometimes, Steroids may be injected directly into the joint to decrease the pain and swelling.

There is also a group of drugs called **Biologic Agents** which can control JIA quickly and effectively. They are given as injections and are expensive. Your doctor is the best judge of which drug is best for your child.

b. Exercise

Once inflammation is controlled, it is very important to rebuild muscles and ligaments previously weakened by the arthritis. Exercise helps to build muscle strength which can help to stabilize the joints and recover their range of motion. A physiotherapist is a good person to ask for advice about what kind of exercises to do. Splints and other devices are sometimes useful as well. Children should be encourage to be active and keep fit as much as possible. Most children with **JIA** can take part fully in physical activities and selected sports when their symptoms are under control. During a disease flare, limiting certain activities may be necessary, depending on the joints involved. An acutely swollen and painful joint should be rested. Once the flare is over, the child can start regular activities again. Swimming is particularly useful because it uses many joints and muscles without putting weight on the joints.

c. Complementary and Alternative Therapies

Although there is little research to support alternative treatments such as acupuncture or massage, some people seem to benefit from them. Let your doctor know if you are using these as well.

What are the complications of Juvenile Idiopathic Arthritis?

Sometimes **JIA** can involve the eye and cause inflammation called **Uveitis**. Children with **JIA** should undergo regular eye checks by an ophthalmologist.

Can I prevent Juvenile Idiopathic Arthritis?

As we don't fully understand the cause of **JIA**, there is no way to prevent its onset. However, the disabilities caused by **JIA** can be prevented with early diagnosis and treatment. A healthy balanced diet and regular exercise are also helpful.

How can the family help a child live well with Juvenile Idiopathic Arthritis?

Family members can do several things to help the child physically and emotionally:

- Get the best care possible
- Treat the child as normally as possible
- Learn as much as you can about your child's disease and its treatment – attend Educational Talks, Website portals, books, etc.
- Insist that your child take the treatment
- Encourage exercise and physical therapy for the child
- Work with therapists and other healthcare providers involved in your child's care

For more information, visit the following websites:

Arthritis Foundation (USA)
www.arthritis.org

American College of Rheumatology
http://www.rheumatology.org/practice/clinical/patients/diseases_and_conditions/juvenilearthritis.asp