Rheumatic fever secondary prevention guidelines

Secondary prevention is the use of antibiotics to people with a history of the Russian Federation to prevent the infection of the Gas, the subsequent recurrence of the Russian Federation and to minimize the progression of RHD. Secondary prevention against RUSSIA was first recommended by the American Heart Association in the 1950s and remains the basis of disease-changing therapies for RHD. Administration of the right antibiotics, at appropriate intervals, consistently over a number of years, seems to prevent the development of new GENERAL infections, and subsequent relapses of the Russian Federation. Preventing recidivism of the RF slows down, or perhaps even stops the development of severe RHD. A number of guidelines have been developed to guide secondary prevention regimes, providing advice on the choice of antibiotics, doses,

frequency and duration of secondary prevention. Some of these issues are discussed below. Benzatin penicillin G (BPG) is a panicillin salt injected as a deep intramuscular injection. Low solubelence produces long-term concentrations of penicillin in the serum, detectable in the blood within a few weeks after administration. It is believed that such a low level of penicillin provides sufficient protection against GAH infection and recurrence of MS. All major global guidelines for RHD recommend BPG as the first line of choice for secondary prevention. These recommendations are supported by historical trials that demonstrate excellent protection against regular BPG injections compared to oral penicillin therapy. Evidence of optimal dose intervals suggests that 2 weekly BPG injections are somewhat more effective, with 3 weekly injections that are more effective than 4 weekly injections. However, most guidelines recommend a 3 or 4 weekly dose schedule as a pragmatic compromise. The usual adult dose of BPG for secondary prevention is 900 mg (1.2 IU). Smaller doses for children are recommended in most weight-based guidelines. In recent years, many countries have faced a shortage of bpG. Background information for governments and pharmacists buying BPG can be found in the management section of this site. Patients and health care providers are understandably concerned about the risk of anaphylaxis from BPG injections. The best information on adverse reactions and allergies to BPG comes from a paper by the International Group for the Study of Rheumatic Fever in 1991. Between 1988 and 1990, they looked at 1,790 people from 11 countries with 32,340 BPG injections. In this study: 57/1790 people (3.2%) 4/1790 people (0.22%) anaphylaxis (1.2/10,000 injections) 1/1790 people (0.05%) died (0.31/10,000 injections). This death occurred in a 15-year-old patient with severe mitral valve disease and congestive cardiac Overall, disease changes benefiting from BPG injections outweigh the small risk of a fatal allergic reaction. Anaphylaxis is a severe, life-threatening, generalized or systemic system diagnostic criteria are further set out by the World Allergy Association. Despite serious concerns about BPG's anaphylaxis, it remains unclear whether the adverse events were genuine hypersensitivity reactions. Some reported cases do not have many features of anaphylaxis (e.g., swollen airways, shortness of breath) and other causes (such as contaminated BPG batches, unintentional IV injections, or vasovagalal episodes in people with severe pre-existing valvular disease) have not always been ruled out. Thus, the issue of anaphylaxis should be thoroughly investigated before embarking on activities such as routine skin testing. Managing the risk perception of BPG injections is an important part of the formation and support of the RHD control program. Deaths, believed to be penicillin- could dramatically undermine community participation and risk greater lives if people living with RHD stop prevention. Strong protocols for administering penicillin and managing the adverse reaction of the drug are needed to deliver the medication safely. Wherever possible, the people managing BPG should get detailed training in anaphylaxis management: the World Allergy Organization has developed guidelines and resources in different languages that can be adapted to your environment. Effective management of anaphylaxis will require training and equipment. All clinicians are responsible for monitoring and reporting adverse reactions and anaphylaxis. More than 65 countries have any drug agency or pharmaceutical program. It may be possible to work with drug agencies to strengthen the capacity to monitor adverse reactions to all medicines at the local or national level. Resources are provided by the World Health Organization and partners. Phenoxymethylpenicillin (Pen V) can be used for secondary prevention in patients with a strong contraindication to BPG injections. The usual dose is 250 mg orally twice a day. Alternative antibiotics A small minority of RHD people will have a history of penicillin allergies and be unable to get BPG or oral penicillin prevention. In these cases, other oral antibiotics will be needed. A number of different oral antibiotics can be used, although all provide lower protection against RF relapse. Building relationships with trusted health workers appears to be an important determinant of secondary prevention. One dedicated health care worker in charge of BPG administration and commitment appears to improve up absorption. Thanks to improved access to hospitals and improved transport infrastructure across the island, there is now a significant get injections im penicillin. Key to better observance was enthusiasm, dedicated staff in the rheumatic fever program and a reminder of the phone call to recall patients injected. - Satu Viali, Samoa, 2011 Decentralized Dispensary and Administration Local Medical Staff may be able to source, prescribe, distribute or manage secondary prevention in their communities rather than rely solely on central providers in major centers. In Kiribati, the RHD monitoring programme worked with the Ministry of Health to move THE delivery of BPG from the central hospital to supported local clinics. Legal and regulatory systems may be required to make this possible, especially if injections must be provided by health professionals or others who do not normally inject. Minimize pain and fear of pain Although there is conflicting evidence on how much pain from injections affects the patient's compliance it makes sense to minimize pain and discomfort. A number of programs have developed injection protocols or guidelines to reduce pain on BPG administration - some of these suggestions include: Using a 21st caliber needle - less needles are much more likely to block and increase pain during administration. Allow alcohol from the tampon to dry before inserting the needle Give injections as soon as the solution has been mixed, blockages in the needle are likely to form if there is a delay to apply pressure with the thumb for 10 seconds before inserting needle delivery injections very slowly (preferably more than 2-3 minutes) to distract the patient during the injection with a conversation or game Production Preventive Card Recordings BPG Administration was a popular option for the administration to administer and record the next appointment date. In the early years of the WHO programme to combat BPG, maps were issued and countries were asked to adapt their own format. The state-of-the-art RHD Pacific Control Program also uses personal drug cards tailored to local language and needs. Explore Mobile Injection Delivery Some programs may fund home visits by nurses or care workers to deliver secondary injection prevention. While this approach is potentially expensive, it reduces inconvenience for people living with RHD, and maximizes opportunities for joining. Memory Signals In 2006, the Central Australia RHD Management Program launched a new attempt to encourage people with RHD time to inject BPG with a full moon. The full moon strategy was developed in accordance with the traditional approaches of indigenous peoples living with RH.. A number of events have been developed, including personal calendar cards, full-moon posters and radio advertising. A moderate increase in BPG absorption has been demonstrated with a more consistent absorption during the full moon. Other features may include providing calendars or developing a smartphone app. Text messages and Text message calls (SMS or texts) can be used to remind people what injections should. There is some evidence that the text how health reminders can improve destination attendance. CARRIE ARMSTRONGM Pham Doctor. 2010 February 1;81(3):346-359.Although the overall incidence of acute rheumatic fever and rheumatic heart disease is low in most parts of the United States, they are the leading causes of cardiovascular mortality during the first five decades of life in developing countries. This inequality serves as a reminder of the importance of remaining vigilant in preventing these diseases. The American Heart Association (AHA) recently updated its recommendations for the prevention of rheumatic fever. Streptococcus Group A (GAS) pharynx infections are the precipitous cause of rheumatic fever. Proper diagnosis and adequate antibiotic treatment of GAH infections can prevent acute rheumatic fever in most cases. DIAGNOSIS STREPTOCOCCAL FARINGITISACut pharyngitis is caused by viruses much more often than bacteria. However, differentiating GHA pharyngitis from other causes of acute pharyngitis is often difficult because none of the clinical findings suggestive of GHA infection is specific enough in itself for diagnosis (table 1). The history of recent exposure is useful in diagnosis, as well as awareness of the prevalence of GHA infections in society. If clinical and epidemiological results indicate A GAS infection, microbiological confirmation with throat culture or rapid antigen detection test (RADT) is required. Diagnosis of pharyngitis is easier to exclude than to confirm, so testing is usually not required in patients with findings suggestive of viral origin. Treatment is indicated for patients with acute pharyngitis who have a positive throat culture or RADT. However, due to the low sensitivity of many RADTs, a negative test does not rule out A GAZ infection, and throat culture usually needs to be performed. The exceptions are adults whose incidence of pharyngitis is a small number of gas and the risk of acute rheumatic fever is low. In this population, the diagnosis of pharyngitis can only be diagnosed on the basis of RADT, without confirming the negative results of throat culture. Antistreptococcal antibody reflect the past, not the present, immunological phenomena and therefore cannot be used to determine whether a patient with pharyngitis and gas in the throat is infected or simply a streptococcal carrier. If antistreptococcal titers are present, elevated or increased, can confirm the recent infection of GHA and are valuable in detecting prior GHA infection in a patient suspected of rheumatic fever. TREATMENT OF STREPTOCOCCAL PHARYNGITISPrimary prevention of rheumatic fever requires adequate soda of gasingitis. When choosing a treatment regimen, doctors should take into account bacteriological and clinical efficacy, ease of compliance regime (i.e. dosing frequency, duration of therapy and deliciousness), cost, cost, the activities of the chosen agent and potential side effects. Intramuscular penicillin G benzatine, oral penicillin V potassium and oral amoxicillin are recommended antimicrobials for the treatment of pharyngitis gas in people without penicillin allergies (table 2). The CEO's resistance to penicillin has never been documented, and penicillin prevents primary bouts of rheumatic fever even when it begins nine days after the onset of the disease. Patients are no longer considered contagious after 24 hours of antibiotic therapy. Penicillin V potassium is preferable to penicillin G benzatine because it is more resistant to stomach acid. However, penicillin G benzatine should be considered in patients who are unlikely to complete a 10-day course of oral therapy, in those with a personal or family history of rheumatic fever or rheumatic heart failure, as well as in those with environmental factors that put them at risk of rheumatic fever (e.g. overcrowded living conditions, low socioeconomic status). OTHER RECOMMENDATIONSBecause Most patients with GAS Pharyngitis respond well to antimicrobial therapy, after throat culture treatment is shown only in those who remain symptomatic, who have recurrent symptoms, or who have had rheumatic fever previously. With the exception of individuals who have or have had rheumatic fever, repeated courses of antibiotics are generally not indicated in amptomatic individuals who continue to harbor GHA after appropriate therapy. Although acute infections with group B and C of beta-hemolytic streptococcus may seem similar to GHA pharyngitis, rheumatic fever has not been reported as a complication of these infections. Recurrent rheumatic fever is associated with aggravation or development of rheumatic heart disease. Prevention of recurrent PHAS pharyngitis is the most effective method of prevention of severe rheumatic heart disease. However, ghaz infection should not be symptomatic to cause relapse, and rheumatic fever can be repeated even when the symptomatic infection is treated optimally. Therefore, the prevention of recurrent rheumatic fever requires continuous antimicrobial prevention, not recognition and treatment of acute episodes of GASH pharyngitis. SECONDARY PROPHYLAXISContinental Prevention is recommended for patients with well-documented history of rheumatic fever and in patients with evidence of rheumatic heart disease (tables 3 and 4). Prevention should be started as soon as acute rheumatic fever or rheumatic heart disease is diagnosed. To eradicate residual gas, patients with acute rheumatic fever should be given a full course of penicillin, even if the culture of the throat is negative. Continuous prevention provides the most effective protection against recurrence of rheumatic fever. Since the risk of recurrence depends on many factors, doctors should determine the appropriate duration on a case-by-case basis, and considering the presence of rheumatic heart disease. Patients who have had rheumatic carditis, with or without valvular disease, are at high risk of recurrence and are likely to have increasingly severe cardiac involvement with each episode. These patients should receive long-term antibiotic prevention and into adulthood, and possibly for life. Patients with persistent valvular disease should receive prevention within 10 years after the last episode of acute rheumatic fever or up to 40 years, depending on what is longer. At this time, the severity of valvular disease and the possibility of exposure to GAS should be determined, as well as consider continuing prevention (possibly lifelong) in high-risk patients. In the United States, penicillin injection of G benzatine every four weeks is a recommended preventive regimen for secondary prevention in most cases. In some populations, administration every three weeks is justified because the level of the serum drug can drop below the protective level up to four weeks after the initial dose. A three-week dosing regimen is recommended only for patients with recurrent acute rheumatic fever, despite the four-week regimen. The benefits of penicillin G benzatine should be weighed with inconvenience to the patient and pain from injections, which causes some patients to stop prevention. Successful oral prevention depends on the patient's adherence to the prescribed regimen. Patients should be given careful, repeated instructions on the importance of compliance with the dosing regimen. Even with optimal patient adherence, the risk of recurrence is higher in patients receiving oral prevention than those receiving penicillin G benzatin injections. Thus, oral regimens are more suitable for patients with a lower risk of recurrent rheumatic fever. AHA no longer recommends the prevention of infectious endocarditis in most patients with rheumatic heart disease. The exceptions are patients with prosthetic valves or valves, repaired prosthetic material, patients with previous endocarditis or specific forms of congenital heart defects, as well as recipients of cardiac transplantation, who develop cardiac valvulopathy. In these patients, an agent other than penicillin should be used to prevent infectious endocarditis because alpha-hemolytic streptococcus probably developed resistance to penicillin. Post-streptococcal reactive arthritis (PSRA) may occur after an episode of GAS pharyngitis in patients who do not have any other major criteria for acute rheumatic fever. PSRA usually follows a symptom-free interval of about 10 days after gas pharyngitis, is cumulative and includes large and small joints and an axe skeleton, and does not respond to aspirin therapy. Unlike arthritis associated with rheumatic fever occurs two two Three weeks after the episode of GHA pharyngitis, is migratory and transient, involves only large joints, and responds quickly to aspirin therapy. Although all patients with PSRA have serological evidence of a recent GHA infection, GHA is isolated in no more than half of these patients who have throat culture. Because valvular heart disease can develop in patients with PSRA, secondary prevention should be administered within one year of the onset of symptoms, and these patients should be observed for several months for clinical evidence of carditis. If no such evidence is observed, prevention may be discontinued. However, if valence disease is detected, the patient should be classified as having acute rheumatic fever, and secondary prevention should be continued. PANDASIt has been suggested that an autoimmune response after streptococcal infection may lead to obsessive-compulsive disorder or tics in some children. This concept, known as PANDAS (children's autoimmune neuropsychiatric disorders associated with streptococcal infections), is controversial, and current evidence suggests that it should be considered as an as yet unproven hypothesis. Until a causal link between PANDAS and GAS infections is established, regular laboratory testing for GAH is not recommended to diagnose the disease, and long-term prevention or immunoregulatory therapy is not recommended. Note page 2Please: This information was current at the time of publication. But medical information is constantly changing, and some of the information presented here may be out of date. For regular updates on various health issues, please visit familydoctor.org, AAFP Patient Education website. Am Pham Doctor. 2010 Feb 1;81 (3):304. See relevant articles on fda box warnings. Reports of potentially dangerous drugs seem to be always in the news. All this information can be misleading and overwhelming. How can you be sure that your medications are safe to take? The U.S. Food and Drug Administration (or FDA) is a government agency that approves over-the-counter and prescription drugs. The drug must be tested for many years before it can be sold. Even after the drug has been approved, the FDA continues to make sure it is safe. If the FDA is concerned about medicine, it will issue a warning. In some cases, the FDA will decide that the drug can no longer be sold. The black box warning (also called the box warning) is the most serious warning issued by the FDA. It is used to warn patients and doctors about serious side effects Medication. Yes. The black box warning will only alert you and your doctor that the FDA is investigating a possible side effect. This side effect may be rare, or it may not apply to you. Talk to your doctor if you are worried about your medication. The benefit you get from medicine may be bigger than a side effect. A drug handout guide that your pharmacist will give you if your medication can cause serious side effects. Most medicines with black box warnings have an medication guide. Talk to your doctor or pharmacist if you have any questions about what you are reading in the medication guide. Write down as much information about the report as possible. Talk to your doctor as soon as possible. Do not stop taking medication if your doctor tells you. This handout is provided to you by your family doctor and the American Academy of Family Physicians. Other health-related information is available online in AAFP . This information provides a general overview and may not apply to everyone. Talk to your family doctor to find out if this information applies to you and get more information on the subject. The © in 2010 by the American Academy of Family Physicians. This content is owned by AAFP. A person browsing it on the Internet can make one printout of the material and can only use this printout for their personal, non-commercial reference. Otherwise, this material cannot be downloaded, copied, printed, stored, transferred or reproduced in any environment, regardless of whether it is known or later invented, except where it is permitted in writing by AAPP. Contact afpserv@aafp.org copyright issues and/or requests for permission. Page 3 Please note: This information was current at the time of publication. But medical information is constantly changing, and some of the information presented here may be out of date. For regular updates on various health issues, please visit familydoctor.org, AAFP Patient Education website. Am Pham Doctor. 2010 Feb 1;81 (3):313. See relevant articles about erectile dysfunction. Erectile dysfunction (ED) is when a person cannot get or maintain a good enough erection to have sex that satisfies him and his partner. It's normal to have ED from time to time, but if it happens a lot, it could mean that there's a big problem. Men can have ED at any age, but this usually happens in middle-aged and older men. The most common cause of ED is a lack of blood flow to the penis. Other causes include atherosclerosis (hardening of the arteries); High cholesterol or blood pressure; Low testosterone levels; abnormal hormone levels; Smoking cigarettes and the use of alcohol, amphetamine, cocaine, heroin and marijuana. Anxiety, depression, stress and a history of sexual violence can also cause ED. When you get an erection, signals from the brain are directed to the nerves and blood vessels in the This allows the penis to be filled with blood. Some medical conditions can block these signals, including strokes, spinal injuries, pelvic injuries, Parkinson's disease, and multiple sclerosis. Prostate or pelvic surgery, and pelvic nerve damage from diabetes can also cause ED. Many medications can stop men from getting or may reduce a man's desire to have sex. Some of the most common medications are medications used to treat high blood pressure, depression, heartburn, allergies, pain, seizures, and cancer. Ask your doctor if any of the medications you are taking can cause ED. You may have to quit smoking or using drugs, drink less alcohol, lose weight, reduce stress, and start exercising. There are pills that can help you get an erection. If they don't work, there are other medications that can be injected or inserted into your penis. Your doctor can teach you how to do it. A vacuum pump or inflators can also help you manage ED. To see the full article, log in or buy access. This handout is provided to you by your family doctor and the American Academy of Family Physicians. Other health-related information is available online in AAFP . This information provides a general overview and may not apply to everyone. Talk to your family doctor to find out if this information applies to you and get more information on the subject. The © in 2010 by the American Academy of Family Physicians. This content is owned by AAFP. 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