Clinical management of measles and rubella

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Measles and rubella are highly contagious diseases affecting mainly children. Measles virus is a member of paramyxovirus. Typical clinical manifestations include cough, coryza, and conjunctivitis which develop after an incubation period of 8 to 12 days. Diffuse maculopapular rash appears 14 days after exposure with fusion and exfoliation. Several complications could occur such as encephalitis and secondary bacterial infection. Rubella tends to resemble measles clinically but usually does not manifest with the prodrome of "3C", namely cough, coryza, and conjunctivitis. Measles used to be a prevalent infection in Taiwan until 1978 when universal immunization was adopted in Taiwan. Cases of measles decreased dramatically thereafter and Taiwan has become essentially measles free since 1990. Although effective vaccine and vaccination policy are available, measles still occurs in some developed country such as Japan and Switzerland. This phenomenon stems from inadequate vaccination. Either the government does not practice vigilant vaccination policy or parents refuse to let the kids receive vaccination. Japan is especially relevant because it is close to Taiwan and imported measles from Japan has been documented in Taiwan. Most young physicians in Taiwan have never seen a case of measles or rubella, and this makes a quick and correct diagnosis of these exanthematous illnesses difficult. Once a correct diagnosis can be made, subsequent actions have to be executed in order to control further outbreak. Vaccine and immunoglobulin are effective to contain measles outbreak, whereas vaccination and quarantine are the major tools to control rubella outbreak and prevent congenital rubella from happening. Enforcement of vaccination program and education of clinicians are vital for Taiwan to be free from the threat of measles and rubella.