◆ Mumps vaccine (live vaccine) 【おたふくかぜワクチン(生ワクチン)英語説明書】 (1) Cause and course

Mumps is caused by the mumps virus and is spread by droplet infection. The viruses proliferate and spread over the body and cause lesions in various internal organs. The incubation period is 2-3 weeks. The period which an infected person may infect those around them is believed to be from several days before onset to 5 days after start ofswelling of the parotid gland, submaxillary gland, or sublingual gland.

The primarysymptom is swelling of the parotid gland. The swelling is painful and exhibits indistinct borders. The submaxillary gland and/or sublingual gland may also develop swelling, and may also be accompanied by fever. When an older child or adult contracts the disease, the symptoms are marked and the frequency of complications is greater. The most frequently encountered complication is aseptic meningitis, at a diagnostic frequency of 1-10%.

Although lower in frequency, other complications include encephalitis and pancreatitis. Adolescent and older men may also develop the complication of orchitis and women, oophoritis.

Special caution is required for the difficult to treat complication of hearing loss.

(2) Overview of vaccine

This is a live vaccine containing attenuated mumps viruses. The post-inoculation seroconversion rate is high, at more than 90%, and in domestic outbreak investigation, the effect of the vaccine is believed to be about 80%. Most people who develop the disease despite being vaccinated generally experience a milder form of the disease. (Report by Mumps Vaccine Working Team of the Vaccination Working Group) Possible adverse reactions to mumps vaccines available on the market include mild swelling of the parotid glands in 1% of the individuals who received this vaccine. The frequency of the adverse reaction of aseptic meningitis is stated to be about 1 in every 1,600-2,300 persons vaccinated (from vaccine package insert); however, although it has recently been reported that there are differences in frequency depending on the age of vaccination, it has been reported that the frequency is even lower. Given the 1-10% incidence of the complication of aseptic meningitis in spontaneous infections; as well as the risk of hearing loss, the need for extended absence from nursery or elementary school when infected; and the high incidence in children aged 3-6; it is recommended that children be vaccinated at the same time as, or as soon as possible after, MR vaccine phase 1, the first varicella vaccine injection, the Hib vaccine booster, and the pediatric pneumococcus vaccine booster, etc., and at the very latest, no later

than 3 years of age, which is the high incidence age. To ensure the preventative effect, the Japan Pediatric Society recommends the second vaccination to be given at the same time as the MR vaccine phase 2.

◆おたふくかぜワクチン(生ワクチン)

(1) 病気の説明

おたふくかぜはムンプスウイルスの飛沫感染後、増殖したウイルスは全身に広がり、各臓器に病変を起こします。潜伏期は2~3週間です。周りの人に感染させる可能性のある期間は、発病数日前から耳下腺、顎下腺又は舌下腺の腫脹が始まった後5日を経過するまでと考えられています。主要症状は耳下腺の腫脹で、境界不鮮明で均一なやわらかい痛みを伴った腫脹を示します。顎下腺、舌下腺が腫脹することもあり、発熱を伴うこともあります。年長児や成人が罹患すると、症状が著明で、合併症の頻度が高くなります。合併症で最も多いのは無菌性髄膜炎で、診断される頻度は1~10%です。頻度は少ないですが、他に脳炎、膵炎などがあります。思春期以降の男性では精巣炎、女性では卵巣炎を合併することもあります。特に難治性である難聴合併への注意が必要です。

(2) ワクチンの概要

ムンプスウイルスを弱毒化した生ワクチンです。ワクチン接種後の抗体陽転率は90% 以上と高く、国内での流行時調査では、ワクチンの効果は80%程度と考えられています。 ワクチンを受けていたにもかかわらず発症した人のほとんどは、軽くすんでいます。(予防接種部会・おたふくかぜワクチン作業チーム報告書)

現在市販されているおたふくかぜワクチンの副反応として、耳下腺の軽度腫脹が1%位にみられます。無菌性髄膜炎の副反応報告頻度は、接種1,600~2,300人に1例程度(ワクチン添付文書)と記載されていますが、最近の報告では接種年齢によって頻度に違いはあるものの、さらに低い頻度であることが報告されています。自然感染での無菌性髄膜炎の合併が1~10%あることや難聴のおそれもあること、罹患すると保育所や学校を長期間休ませなければならないこと、発病は3~6歳が多いことを考慮すると、接種は、MRワクチン第1期、水痘ワクチン1回目、Hibワクチン追加、小児用肺炎球菌ワクチン追加等と同時期に、あるいは終了したらできるだけ早期に、少なくとも好発年齢である3歳より前に接種することが勧められます。また、日本小児科学会は予防効果を確実にするため、MRワクチン第2期と同時期に2回目の接種を推奨しています。