Pediatric Vaccinations Age 4-6 Years

Vaccinations are a type of primary prevention, meaning that their goal is to decrease the overall incidence of disease in the population. At 4-6 years of age, children receive their final doses of the diphtheria, tetanus, and acellular pertussis (DTaP) and inactivated poliovirus (IPV) vaccines and their second doses of the MMR and varicella vaccines. General contraindications to all vaccinations include serious (anaphylactic) allergic reactions to any vaccine components or previous dose of the [articular vaccination and those with severe immunodeficiency. Live vaccines (MMR, varicella, yellow fever, nasal influenza, oral rotavirus) should not be given to immunosuppressed or pregnant patients.

PLAY PICMONIC

Very DIM between 4-6pm

Varicella Zoster

Varsity Zorro Virus

VZV is a herpesvirus that causes the illness known as chicken pox upon primary infection. The varicella vaccine contains a single strain of live attenuated VZV. It is available alone (VARIVAX) or as a part of the MMRV vaccine. Vaccination is recommended at age12 months or older for healthy people who have not had varicella illness, with 2nd dose at age 4-6 years. Immunized patients may still have breakthrough varicella, though milder than unimmunized patients and rarely spreads. Vaccination is contraindicated in patients with allergy to neomycin or gelatin. Although rare, it has been associated with development of herpes zoster after immunization. Even without a reliable history of varicella infection, most people over 18 years of age will still be immune.

DTaP - Diphtheria Tetanus acellular pertussis

DTaP-dancer

Diphtheria is an acute respiratory illness caused by Corynebacterium diphtheriae, and has a fatality rate of up to 20% among children <5 yrs old. Tetanus is a spasmodic nervous system disorder caused by Clostridium tetani toxin. Bordetella pertussis causes an acute respiratory illness known as "whooping cough". The DTaP vaccine contains diphtheria and tetanus toxoids (inactivated toxins), and inactivated acellular pertussis to protect against these three infections. It is administered intramuscularly (IM). The final dose of of DTap is given between 4-6 years of age, after which children switch to the adult booster schedule receiving the tetanus, diphtheria, and acellular pertussis vaccine (Tdap). Contraindications to immunization include encephalopathy without an identifiable cause within 7 days of a previous dose, or progressive neurologic disease such as infantile spasms or uncontrolled epilepsy.Pertussis booster (Tdap) vaccine is now recommended during adolescence, regardless of immunization status and is also recommended even if the patient has already had pertussis. Tdap (childhood tetanus) is given at age 11-12; then Td (adult tetanus) every 10 years.

IPV - Inactivated Polio Vaccine

Polio-player Syringe

Two polio vaccines exist - inactivated poliovirus vaccine (IPV) and live attenuated poliovirus vaccine (OPV), although OPV is no longer used in the U.S. it is still used in many parts of the world. IPV induces active immunity against poliovirus types 1, 2, and 3. It is available alone and in combination with other pediatric vaccines. It is administered IM or subcutaneously, and the final of 4 doses is given between 4-6 years of age. Any child up to 18 years of age should receive all doses, if behind. It is not routinely given to unvaccinated adults unless they plan to travel to endemic areas. IPV is contraindicated in pregnancy or those with a pregnant female at home.

MMR

M&M-aRt Syringe

The illnesses caused by the measles, mumps, and rubella viruses have all been known to cause significant complications, morbidity and mortality, including encephalitis, aseptic meningitis, and significant birth defects. Two formations are used to vaccinate against these viruses in the U.S. The MMR and MMRV (measles, mumps, rubella and varicella) vaccinations are both live attenuated vaccines. Two doses of MMR or MMRV are required for complete vaccination, and the second of which is given at 4 to 6 years of age. MMRV is generally used for this dose, as it is recommended for use in children 4 - 12 years of age. As live vaccines, MMR and MMRV are contraindicated in immunocompromised hosts, patients allergic to the vaccine components gelatin and neomycin, and pregnancy (due to theoretical risk of congenital rubella syndrome). Documented egg allergy is not a contraindication to the MMR.