Infanrix-hexa introduction for routine infant schedule in BC in February 2009

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In February 2009, Infanrix-hexa will be introduced in BC. It is a combination vaccine for infants starting their primary vaccine series against diphtheria, tetanus, pertussis, polio, Haemophilus influenzae type B, and hepatitis B. The primary advantage of Infanrix-hexa is a single injection against all six diseases including hepatitis B. This vaccine is to be used for the doses given to infants at 2, 4, and 6 months of age, and will replace the use of Pediacl and Recombivax HB (hepatitis B) at these ages. The booster dose at 18 months will continue to be given with Pediacl. Infanrix-hexa and Pediacl are not deemed interchangeable for the primary three-dose infant series, which should be completed with the same product used for the first dose.

Providers will have become accustomed to a fully liquid product for the DPT-IPV/Hib series with Pediacl. Infanrix-hexa, like Pediacl’s precursor Pentacel, requires reconstitution of the lyophilized Hib vaccine, and shake the resulting mixture to fully dissolve the Hib component. The resulting “hexa” product is administered intramuscularly, in the anterolateral thigh of the infant, using a 7/8" to 1" needle. Infanrix-hexa may be administered at the same visit as Prevnar and Neisvac-C but at a different injection site.

Infanrix-hexa contains higher content than Pediacl of diphtheria and tetanus, equivalent polio types 1, 2, and 3, and higher pertussis antigenic content for the three components that are present in both vaccines (pertussis toxoid, filamentous hemagglutinin, and pertactin). Infanrix-hexa does not contain pertussis fimbriae agglutinogens 2 and 3, and is considered a three-component acellular pertussis vaccine unlike that in Pediacl, which contains a five-component pertussis vaccine. Efficacy against culture confirmed pertussis with at least 21 days of paroxysmal cough is similar between the two vaccines, although the five-component vaccine may have greater efficacy against mild pertussis. There are no head-to-head studies comparing Infanrix-hexa with Pediacl for the primary series. The immunogenicity and reactogenicity data from 22 studies of Infanrix-hexa, Infanrix-IPV-Hib, Pediacl, and Pentacel have been reviewed by the National Advisory Committee on Immunization and deemed to indicate comparable levels of protection. The reactogenicity profile is also similar with respect to the frequency and severity of local and systemic reactions. The immune response to the hepatitis B vaccine component is higher after Infanrix-hexa compared with separate administration of Pentacel and Recombivax-HB vaccines. Similar findings have been seen in studies comparing Engerix-B with Recombivax-HB administered alone.

Infanrix-hexa is a GlaxoSmithKline product and was approved for use in Canada in 2004. It has been approved in many of the European Union countries and has been in routine use in Australia since 2005. The original formulation of the product approved in 2004 in Canada included thimerosal as a preservative in the Engerix-B (hepatitis B) component of the vaccine. BC elected to wait for the approval of the thimerosal-free formulation, now available, because a decision had been made to use thimerosal-free vaccines for infant and childhood immunization when possible. This was based on a desire to maintain public confidence in vaccines because of ongoing concerns about the safety of the mercury-based preservative, despite the demonstrated lack of association with adverse outcomes, including autism spectrum disorders.

BC is the only Canadian jurisdiction introducing Infanrix-hexa at this time. Yukon Territory, Northwest Territories, Newfoundland, New Brunswick, and Prince Edward Island also have infant hepatitis B programs, but at present these are on other three-dose schedules ranging from birth to 15 months of age, whereas the 2-, 4-, and 6-month hepatitis B schedule in BC lends itself to ready Infanrix-hexa adoption.

For complete information on the Infanrix-hexa product and related recommendations, please refer to the references below. Additional materials will be provided to health care providers in BC as this product is introduced.

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Great BCMJ covers

I feel like a fine art collector every time my BCMJ arrives. The quality of the covers is second to none, often profound, usually colorful, and always stimulating. Thank you BCMJ and Jerry Wong in particular for sharing your wonderful work.

—Steve Ashwell, MD
Dawson Creek

Re: Patient consent

I read with interest the recent letter to the editor by the listeriosis patient, the response from the authors, and the editorial note.¹

There was an apology regarding patient consent for publication from the editor-in-chief of a different journal 10 years ago.²³

It is a good idea to have in place a written consent from a patient whose case history is being published. However, caution should be exercised for too strict a guideline.

The author reported a case of Munchausen’s syndrome presenting as prevarication anaphylaxis.⁴ This report and other interesting cases from our psychiatry colleagues may not be published if the guideline on patient consent for publication is strictly followed.

—H.C. George Wong, MD
Vancouver

References