IMPORTANT NOTICE from JANE CHIODINI (13th March 2017)

Permission to put this FAQ document for hepatitis A was very kindly granted by the Travel and International Health Team of Health Protection Scotland. My thanks go to them for this support. Please be aware it was updated on 17 February 2017 and was accurate at that time. Whilst I will endeavour to check with any subsequent updates on this document, I would ask you to read this <u>disclaimer</u>.

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Hepatitis A FAQs

My patient had one dose of hepatitis A vaccine many years ago but did not complete the course. Should I restart the whole course of vaccination now?

There is no need to restart the whole course of vaccination - one dose now will be sufficient to complete the course.(1)(2)(3)(4)

How long does a completed course of hepatitis A vaccination last?

Current evidence shows that a completed course of hepatitis A vaccination lasts for at least 25 years.(1)(5)

The World Health Organization published their position paper on hepatitis A vaccines in the July 2012, edition of the Weekly Epidemiological Record; in it they refer to one study predicting an estimated duration of protection following a 2nd dose of vaccine at 45years.(6)

The WHO position on hepatitis A vaccine is that immunisation will generate long-lasting, possibly life-long protection.(7)

My patient had an interrupted schedule of hepatitis A vaccination but completed the course - will he still have the 25 years protection?

Yes.(1)

Does the 25 years protection from hepatitis A vaccine start from the time of the first dose or the second?

It starts after the second dose. So if your patient had a first dose 5 years ago and a second two weeks ago, the 25 years protection is from now.

Does previous hepatitis A infection confer life long immunity?

Yes - those with a history of jaundice or who have lived for a long time in endemic areas may have become naturally immune as a result of infection and this immunity lasts for life. Their blood can be tested for hepatitis A IgG antibodies and vaccination is not necessary if these antibodies are present. If insufficient time to check blood for antibodies before travel to a risk area, then giving vaccine will do no harm.

Can I check for antibodies when someone is unsure if they have previously had hepatitis A vaccine?

Although this test can be performed, the usual laboratory hepatitis A IgG test for previous infection does not reliably detect antibodies produced following vaccination.

If the traveller does not have a reliable record of previous vaccination and is at risk of possible infection, then vaccination would be recommended as this would do no harm, even if it had been given previously.

My patient was under 16 years when he had a first dose of hepatitis A vaccine and was given a paediatric vaccine; he is now over 16 years and needs a booster dose - does it matter that he started the course with paediatric vaccine and then has a booster with adult vaccine now?

No - this is the correct way to use the vaccine as both vaccines are the correct dose for the patient at the time of administration; a booster response will take place which gives long term (i.e. 25 years) protection.

My patient was under 16 years when he had a first dose of hepatitis A vaccine and was given a paediatric vaccine; there has been a gap of 5 years and now he is now over 16 years and needs a booster dose - does it matter that he started the course with paediatric vaccine, had a gap in schedule, and then has a booster with adult vaccine?

No - even though there has been a gap both vaccines are the correct dose for the patient at the time of administration; a booster response will take place which gives long term (i.e. 25 years) protection.

My patient started a course of hepatitis A vaccine and had one dose last year. I now want to give hepatitis A and hepatitis B combined vaccine as this is less expensive for the patient than giving the vaccines separately. How many doses of the combined vaccine should I give?

This is not straightforward and you need to know a bit about the vaccine components to understand why:

- Each dose of monovalent hepatitis A vaccine contains more hepatitis A component than the combined hepatitis A and B vaccine*.
- Each dose of monovalent hepatitis B vaccine contains the same amount of hepatitis B as the combined hepatitis A and B vaccine.

(*Not Ambirix, but Ambirix not generally used for travellers.)

So, if you give three doses of the combined vaccine the patient will get too much hepatitis A component but the right amount of hepatitis B. While it is not harmful to give the patient extra hepatitis A component, it is wasteful.

If you give two doses of the combined vaccine, the patient will get the right amount of hepatitis A component but not enough of the hepatitis B component. You would still need to give another single monovalent hepatitis B vaccine to complete the course of hepatitis B.

If you give one dose of combined vaccine, the patient will get enough hepatitis A component (based on the same amount of component as three combined vaccines) but will need two additional hepatitis B vaccines. In this scenario the patient should cover the costs for the monovalent hepatitis B vaccines if these are being given purely for travel purposes.

Health professionals faced with this dilemma should question whether it is ethical to give more vaccine than is needed to provide optimum protection, purely to save the traveller money.

I want to vaccinate my patient against hepatitis B as I believe that they may be at risk through travel. He is already protected against hepatitis A, but can I give the combined vaccine to save him money as he is reluctant to pay for the hepatitis B?

While it is not harmful to give the patient extra hepatitis A component, it is wasteful. Health professionals faced with this dilemma should question whether it is ethical to give more vaccine than is needed to provide optimum protection, purely to save the traveller money. Hepatitis B vaccine given for travel purposes is normally paid for privately by the patient. However, if a prescriber feels that a patient is at high risk of exposure of hepatitis B they are at liberty to use their own discretion to offer the monovalent vaccine through the NHS.

How long does it take for hepatitis A vaccine to give protection?

Approximately 14 days after the primary vaccination. The average incubation period for hepatitis A infection is 28 days (and can be 3 - 5 weeks) so it may still be worthwhile giving the vaccine at short notice prior to travel.

Is hepatitis A immunoglobulin recommended for pre travel protection?

Before the introduction of hepatitis A vaccine in the early 1990s, hepatitis A immunoglobulin, which provides passive immunity, was the only option available for

travellers at risk of this infection. Because immunoglobulin is a blood product with associated risks, and confers only short term protection, it is not now recommended for use in a travel health context or in an outbreak situation.

There is now evidence that active vaccination gives good protection against illness even if administered shortly before or immediately after exposure.(8)

It can occasionally be useful when active vaccination may be ineffective (e.g. in the immunocompromised) or contra-indicated (previous adverse reaction to vaccination) and is available in the UK.

Additional information on the indications and use of hepatitis A immunoglobulin is available in the Health Protection Agency Immunoglobulin Handbook (external weblink).

References

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This page was last reviewed on 17 February 2017

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