



## ***Influenza immunisation***

In the UK the Department of Health recommends influenza vaccine for those who are 65 years or older and those with:

- Chronic lung disease including asthma
- Chronic heart disease
- Chronic renal failure
- Immunosuppression due to disease or treatment

## ***What should patients who have had GBS be advised about future immunisation?***

Guillain-Barré syndrome is thought to be an autoimmune disease. Vaccines stimulate the immune system. Theoretically stimulating the immune system might exacerbate or lead to a reappearance of an autoimmune disease. There are anecdotal reports of GBS occurring soon after immunizations.<sup>1-5</sup> There was an increase in incidence of GBS after the "swine flu" virus vaccine program in the United States in 1976.<sup>6</sup> More recent information suggests that the occurrence of GBS after currently used influenza and other vaccines is extremely rare.<sup>7</sup> Case control studies have shown no evidence of a significant increase in risk of having received an immunization preceding GBS compared with contemporary controls.<sup>8-10</sup> Retrospective examination of the incidence of GBS for the seasons of the 1992-1993 and 1993-1994 influenza vaccination programs in the United States suggested that influenza vaccination only caused one to two extra cases of GBS per million vaccinees.<sup>11</sup>

Despite this evidence, the belief that GBS is an autoimmune condition and the knowledge that immunizations are designed to activate the immune system give rise to continued unease about immunization following the disease.<sup>12;13</sup> This unease is enhanced by a report of two cases of GBS recurring following swine influenza vaccine.<sup>14</sup> In addition recurrent attacks of chronic inflammatory demyelinating polyradiculoneuropathy have followed tetanus toxoid immunization.<sup>12-15</sup> However many patients have received immunizations after the acute phase of their disease, sometimes repeatedly,<sup>16</sup> without suffering a relapse. The number of such patients has, however, not been monitored and the actual risk is not known. In the absence of adequate evidence and the difficulty of conducting an adequately powered randomised trial, it would be appropriate to audit a recovered GBS patient population to discover what proportion has received immunisations and what was the outcome.

Although the experiment has never been done in GBS, patients with multiple sclerosis have been randomized to receive or not receive influenza vaccine and no evidence emerged to suggest that immunisation stimulated relapse.<sup>17;18</sup> In a recent thorough review Flachenecker et al.<sup>19</sup> found no evidence that immunisation adversely effects the course of multiple sclerosis. In the case of influenza vaccine and hepatitis B vaccines this conclusion was based on large epidemiological studies.

## **Conclusion**

The decision whether to receive a vaccine is an individual one which has to be decided on a case by case basis.

In 2007 for the first time, the manufacturer of at least one influenza vaccine has recommended that it not be given to people who have had GBS in the past. This recommendation has to be balanced against the risk of influenza itself in a particular individual.

Advice should be sought from your own doctor and the Charity cannot offer specific individual comment.

## **Vaccines in CIDP**

Little is known about the risks of immunisation in CIDP. There have been reports of relapse of CIDP soon after immunisation for tetanus in three patients.<sup>20,21</sup>

In 2002 members of the GBS Support Group answered a questionnaire.<sup>22</sup> Sixty five people with CIDP said that they had received vaccines. Sixty had had no problems. Five (8%) said they got worse afterwards. Three (5%) of these said that their symptoms were like a typical relapse of their CIDP. One needed treatment. The other two were already getting neurological symptoms before the immunisation so that the immunisation may not have been to blame. It is difficult to say whether any of these immunisations really caused the relapses. They could have been coincidental. However it is impossible to deny that relapses sometimes happen after immunisations in CIDP. The answers to this questionnaire suggest that the risk lies between 2.5 and 17%. However questionnaires like this often overestimate the risk so that the real risk is probably less and might be much less.

In many other neurological diseases, for instance multiple sclerosis, there is more information and influenza vaccine is considered safe.

## **What should I do?**

**This always depends on your individual circumstances.** You must balance the benefits of the vaccine against the unknown but probably small risk of the vaccine causing a relapse.

**You should always discuss this with your own doctor.** Ask your doctor if the vaccine is really necessary. The following are common questions:

**I am NOT on steroids, plasma exchange, azathioprine or other immunosuppressive drugs: should I be immunised?** Some immunisations are more important than others. For example, most people have already been immunised against tetanus, and boosters may not be essential. However if you have not been immunised within the past 5 years and cut yourself so that dirt gets into the wound then the balance of risks may change in favour of receiving the vaccine.

**I AM on steroids, azathioprine or other immunosuppressive drugs: should I be immunised?** Theoretically your risk of developing infections like a serious case of influenza is greater because you are on these drugs. However your risk of having a relapse of CIDP is also probably less because you are on them. The balance of evidence may therefore be more in favour of having, for instance, an annual influenza vaccine.

**I am on intravenous immunoglobulin: should I be immunised?**

Intravenous immunoglobulin probably makes you less likely to have infections so the need for immunisation is less. Also intravenous immunoglobulin probably makes immunisations less effective. If you decide to be immunised, theoretically it is probably better to do this half way between your intravenous immunoglobulin courses. Reminder: The decision to have a vaccine depends on your individual circumstances and you should always discuss this with your own doctor. You might wish to show him or her a copy of this guideline.

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This text has been agreed by members of the Charity's Medical Advisory Board.