



No.3 – MMR vaccine and

Platelet article reprinted from: **Mar 01**

Title: **MMR vaccine and ITP**

Author: Shirley Watson

As Platelet readers will know, recent publicity that the MMR vaccine can cause ITP is not a new story and has been mentioned in The Platelet before (Dec 96, Sep 97, Mar 00, Sep 00). Dr David Salisbury, Principal Medical Officer at the Department of Health, pointed out that this side effect is listed (although not by the name ITP) on the MMR leaflet issued to parents at the time of vaccination. It states your child may very rarely get a rash of small bruise like spots due to the rubella part of the immunisation about 2 weeks after the MMR. If you see spots like this, consult your doctor.

It was reported in The Lancet in March 95 that there was a causal association between ITP and the MMR vaccine with the risk assessed at 1 in 24,000 vaccinations. Findings from this study were consistent with the view that ITP results largely from the rubella component of the vaccine.

In the new study published on 22nd February 2001 in the Archive Diseases in Childhood (a specialist magazine for paediatricians published by the BMA) researchers from the Public Health Laboratory Service and the Royal Free Hospital analysed certain hospital records of children under the age of 5 who were admitted with ITP within 6 weeks of having the MMR vaccination. Combining data from this and the previous study it was calculated that 2 out of 3 cases of ITP that occur within the six weeks after immunisation are caused by the MMR vaccine. Unlike the earlier report, both the measles and rubella components are now considered likely candidates.

Children with MMR induced ITP typically have the transient self-limiting form of the disease with higher platelet counts and milder symptoms. Generally, no treatment is needed. Importantly, there is clear evidence that those who have already had ITP are at no greater risk of recurrence as a result of the vaccination. There is no evidence that MMR is causally related to chronic, long-lasting childhood ITP.

The risk of ITP developing as a result of the MMR vaccination is now estimated at 1 in 22,300 doses, but this is considerably less than the risk of ITP developing following the illnesses themselves. Measles induced ITP is common, rubella is estimated at 1 in 3000 cases, and even mumps is occasionally associated with ITP. Of course, there are many more serious complications of these diseases than ITP.

Our medical advisors reiterate that the fear of ITP is no reason to avoid vaccination, either for children who have had ITP before or for those who have never had it. Children are much more likely to come to harm from the diseases the vaccine prevents than from the few and rare side effects (such as ITP) associated with the injection.

Addendum

In a previous Platelet edition Professor Lilleyman was asked if he would recommend ITP children to have their normal vaccinations. He replied "The risks of non-vaccination are far greater than the risks of provoking an ITP-like reaction, and I would apply the same logic to children with chronic ITP. The only caveat is that children with very low platelet counts are best having any vaccine by shallow injection into the skin, not deep injection into muscles because of the risk of painful bruises using the latter route."

As all components of the MMR vaccine are live, vaccination should be postponed until 3 months after treatment with high dose steroids (risk of disseminated infection) or immunoglobulin (risk of inhibited response).

Platelet article reprinted from: **Dec 01**

Title: **Booster MMR vaccines**

Source: **Committee of Safety on Medicines**

Children who developed ITP within 6 weeks of the first dose of MMR (or its component vaccines) should have their serological status evaluated before the second dose is due. If serology testing suggests that a child is not fully immune against measles, mumps and rubella then a second dose of MMR is recommended. The Public Health Laboratory Service is offering a free serological testing service for children developing ITP within 6 weeks of the first dose of MMR. This is because those not protected by MMR are at risk of ITP from natural infection, as well as the other complications of measles, mumps and rubella. The MMR vaccine product information is currently being updated to reflect CSM's advice.

1. Miller E. et al. (2001) Idiopathic thrombocytopenic purpura and MMR vaccine. Arch. Dis. Child. 84: 227-229.

Platelet article reprinted from: **Jun 01**

Title: **Is the MMR Vaccine safe**

Author: **Dr D. Roberts, GP, Great Staughton Surgery**

Recent publicity about the MMR (Measles, Mumps and Rubella) vaccine has caused a lot of parents to worry about whether it is safe to have their child vaccinated. Some very limited research from London has suggested that there may be a link between the vaccine and the development of autism and Crohn's disease (an inflammation of the large bowel causing nasty diarrhoea, bleeding and mucus production).

However this research actually contradicts masses of other research from around the world which has confirmed that the vaccine is safe and not associated with these illnesses. One of the problems with autism is that it tends to be diagnosed in childhood at around the age that children get the MMR vaccine. This does not mean that there is a causal link, and indeed the number of cases of autism has not risen since the MMR vaccine was introduced.

On the other hand, many people consider measles to be a mild and harmless illness. GP's of a generation younger than me (middle aged or what?) are unlikely to have seen a case and be even less likely to recognise one. However, measles is in fact a very serious illness, which can cause brain damage, fits and even death. I certainly remember seeing some very seriously ill children during my training, and my memories of this have always led to me encouraging parents to have their children immunised.

So, is the vaccine safe? Well, experience throughout the world seems to confirm that it is, while we can never be completely certain. In Finland, measles has been eradicated completely through the vaccination programme, without any increase in the illnesses mentioned above. On the other hand, in certain parts of this country vaccination levels are dropping to a level where an outbreak is almost certain and undoubtedly some children will die, and others suffer permanent damage. In recognition of this our medical magazines have recently started featuring measles to remind what the rash looks like. These problems are avoidable and what is really a nasty illness can be prevented by vaccination.

Further information: **July 04**

Title: **MMR and siblings**

The parents of a child who developed ITP following the MMR vaccination, asked the ITP Support Association about the advisability of having the child's brother vaccinated, and whether any data existed on the subject.

Professor Brent Taylor, Professor of Community Child Health at University College London, stated:

“We have no direct evidence about risk to siblings (and I'd be surprised if there was any) but none of the children in our study were familial cases.

In view of this, together with the comparative mildness of MMR-associated ITP and the present risk of measles and mumps to individual children (as well as a return of congenital rubella), my advice for families who have had an (apparent) MMR-associated case of ITP would be to have the siblings vaccinated according to the standard schedule.”