AUTISM : IS THERE A VACCINE CONNECTION? PART I.

Vaccination after delivery.

Home

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> ***The routine administration of a live virus vaccine booster, during the postpartum period, to previously vaccinated women who have remained rubella-susceptible, should be reconsidered.***
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> ***It is likely that continued rubella susceptibility in these women, is not due to a problem with the vaccine, but with the woman herself, and therefore it seems reasonable not to attempt to correct it by the administration of more boosters.***
>
> ***Some re-vaccinated mothers are developing unusual problems, and many remain rubella-susceptible. Their children also appear to have an inordinate number of difficulties of their own. Twenty out of twenty five families (80%) in this study have children with autism***
>
> ***Large-scale independent investigations on the possible link between live virus vaccines, MMR, and autism should be undertaken.***

An epidemic increase in the incidence of autism nationwide has been noted in the last few years and was described in "Autism 99, A National Emergency"(1). This increase is still ongoing and indeed accelerating.

Many parents have suspected that such an increased incidence may be due to the administration of certain vaccines, a view vehemently denied by the vaccine authorities. Mothers who themselves were re-vaccinated in adulthood with live virus vaccines have also wondered if by receiving such vaccines, they could have in any way compromised their children's immune system, and predisposed them to adversely react to their own vaccinations.

Andrew Wakefield in an impressive study (2) published in *The Lancet* last year, reported remarkable and original findings, in a series of twelve cases at the Royal Free Hospital, London. He made it clear that his findings only raised questions, and that more studies on the possible relationship between Mumps-Measles-Rubella (MMR) vaccination and

autism were needed. His research was immediately criticized, and the vaccine "establishment" viciously attacked him personally.

Brent Taylor and associates (3), also from the Royal Free Hospital, published their own study this past June in *The Lancet* and reported no increase in autism in the UK after the introduction of the MMR vaccine in 1988.

Their research, which was financed by The Public Health Laboratory and the Medicines Control Agency, was hailed by the vaccine authorities, world wide, as the absolute proof, and the final word, that indeed there was no MMR/Autism link. However, parents of children with autism were not convinced, and many researchers rejected Taylor's methodology and conclusions. No large-scale independent studies have been carried out in the United States.

A study was therefore initiated to examine any connections between the administration of the MMR vaccine or any of its components to a woman in the childbearing age and the development of autism in her children.

Methodology

Members of vaccine and parent groups were contacted via e-mail, and notices were included in newsletters in the UK, Australia, and US. The study outline and questionnaire were also posted in a well-known web site. (4)

Over 280 replies were received in 120 days. Of these, 240 were complete and accepted.

The discovery of unexpected and alarming findings in twenty five families where the mothers received a live virus vaccine shortly after delivery, prompted the release of this information at this time, because of its serious implications.

Review of present recommendations

The following are statements of the vaccine manufacturer and the Centers For Disease Control and Prevention, relative to the administration of live virus vaccines after delivery (the postpartum period):

- *"It has been found convenient in many instances to vaccinate rubella-susceptible women in the immediate postpartum period". (5)*

- *"Recent studies have shown that lactating postpartum women immunized with (rubella) live attenuated vaccine may secrete the virus in breast milk and transmit it to breast fed infants. In the infants with serological evidence with rubella infection, none exhibited severe disease; however, one exhibited mild clinical illness typical of acquired rubella. Caution should be exercised when Meruvax II is administered to a nursing mother". (6)*

- *"It is not known whether measles or mumps vaccine virus is secreted in human milk. Recent studies have shown that lactating postpartum women immunized with live attenuated Rubella vaccine may secrete the virus in breast milk and transmit it to breast-fed infants.*

  In the infants with serological evidence of rubella infection, none exhibited severe disease: however, one exhibited mild clinical illness typical of acquired rubella. Caution should be exercised when MMR-II is administered to a nursing woman". (7)

- *"Excretion of small amounts of the live attenuated rubella virus from the nose or throat has occurred in the majority of susceptible individuals 7-28 days after vaccination. There is no confirmed evidence to indicate that such virus is transmitted to susceptible persons who are in contact with the vaccinated individuals. Consequently, transmission through close personal contact, while accepted as a theoretical possibility is not regarded as a significant risk. However, transmission of the vaccine virus to infants via breast milk has been documented. There are no reports of transmission of live attenuated measles or mumps viruses from vaccinees to susceptible contacts" (7)*

- *"Although vaccine virus may be isolated from the pharynx, vaccinees do not transmit rubella to others, except occasionally in the case of the vaccinated breast feeding woman. In this situation, the infant may be infected, presumably through breast milk, and may develop a mild rash illness, but serious effects have not been reported.*

- *Infants infected through breast-feeding have been shown to respond normally to rubella vaccination at 12 -15 months of age. Breast feeding is not a contraindication to rubella vaccination and does not alter rubella vaccination recommendations."(8)*

- *"Rubella vaccine recommendation: Prenatal screen with postpartum vaccination."(9)*

Descriptions of cases

All mothers received postpartum boosters because they were rubella-susceptible.

Case 1: Mother received MMR in 1994, few hours postpartum. She had no miscarriages prior to 1994 and has had three since. The child, a boy, was normal till he received his MMR vaccine at age 13 months. Autistic symptoms were noted 1-2 months later. A maternal aunt has also remained rubella-susceptible in spite of multiple vaccinations.

Case 2: Mother who was fully immunized received MMR boosters in 1983 and 1991. She was again given another MMR in 1993, 4 hours postpartum. The child, a boy, was breast-fed and was well until age 15 months when he received an MMR vaccine. He developed autistic symptoms within the month, and also has gastro-intestinal (GI) problems (2).

Case 3: Mother had measles and mumps as a child. She received rubella vaccine in 1985, two days postpartum. She did not breast feed because the child had a harelip and cleft palate. The child, a boy, received an MMR at age 15 months. He had gradual onset of autistic symptoms, and is now severely affected. He has received a course of IVIG

infusions, and has elevated measles and rubella titers. He is also positive for Myelin Basic Protein Antibody (MBP). A younger sister is normal and immunized.

Case 4: Mother was fully immunized and received two MMR boosters. She was given a rubella vaccine in the immediate postpartum period. She has developed asthma and "*immune problems*" lately. The child, a boy 18 months of age is still breast-feeding, has allergies, and recurrent ear infections, but no evidence of autism to date.

Case 5: Mother, who was fully immunized, received an MMR vaccine in 1989 shortly after the birth of her 3rd child. This child, a girl, is not autistic, but has had frequently recurring ear infections and required a T&A. Two older brothers born in 1981 and 1987 are normal. So are the younger two sisters born in 1991 and 1997. The mother has had two miscarriages, one at 12 weeks in December 1996 and the other at 14 weeks in January 1999. Family history is positive for immune disease.

Case 6: Mother, who previously had been fully immunized, received an MMR booster 24 hours after she had a normal uncomplicated delivery. The child, a boy is now 13 years old. He had an uneventful newborn period, and breast-fed well. He remained fine till age 4 months when he received his second DPT, after which he developed a high fever and screamed for a long while. He then became extremely listless and difficult to arouse, breast-fed poorly, and started with gastro-esophageal reflux (which progressed and eventually required fundoplication). The boy went on to develop athetoid movements, and was later diagnosed with cerebral palsy. He is severely affected, has serious problems with interpersonal communication and at times "*tunes out the world, and does not respond*". His first MMR vaccination was delayed because of his neurological impairment. A younger brother is well and immunized.

Case 7: Mother, who had been previously immunized, received a rubella vaccine immediately after the birth of her first son in November 1989. She remained rubella susceptible, and was given another rubella vaccine three days after the birth of her second son. She is still rubella susceptible.

The oldest boy, born 11/6/1989, was breast-fed for a very short period. He was routinely immunized, and seems to be normal.

The second son, born 5/31/1991 was breast fed for one month, and received all his immunizations on schedule. At age 2 ½ he started exhibiting autistic symptoms. He was diagnosed as PDD-NOS at Stanford at age 3. He was re-evaluated at UCSF a year later, and a diagnosis of autism was made. He seems to have autistic entero-colitis (2) and complains of itching, earaches and headaches. The third child, a girl, has verbal apraxia.

Case 8: Mother received rubella vaccine booster 8 weeks postpartum in 1983. That child,

a boy, breast fed for one month, was immunized and seems intact. The second child, a boy was born in 1991. Mother reports that her delivery was difficult and that the baby was treated for meconium aspiration.

This boy received his first MMR vaccine at age 14 months, started exhibiting autistic symptoms around age 3, and was diagnosed as Asperger's Syndrome.

Case 9: Mother had a severe reaction to the measles vaccine at age 5. She was given an MMR booster on 9/11/1993, a few days after she delivered a daughter. That daughter, born September 6, 1993, was breast-fed for five months. She was routinely immunized in the first year of life. She *"was sociable, but was not talking and had some OT issues"* at 16 months, when she received her first MMR vaccine. She developed autistic symptoms *"within days"* of the vaccine, and was diagnosed with autism. She also had symptoms of autistic entero-colitis (2).

A younger daughter born 11/20/1997 was nursed for sixteen months.

According to her mother: *"She has some autistic symptoms but not all: she has a sensory integration disorder, and severe speech and language problems.*

She has the same digestive difficulties as her sister, and has been on casein and gluten-free diet since birth. She has not been vaccinated."

Case 10: Mother received rubella vaccine two months after the delivery of her first child, a girl who was born on 5/20/1992 and is well and immunized. The following child, a boy, born 1/14/1994 was breast-fed for six months. He received his first MMR around age 15 months in April 1995.

He started exhibiting autistic symptoms in July of that year, and lost more skills as time went by. He is positive for MBP, and has high measles titers.

The third child, a boy, age 2, is normal.

Case 11: Mother received rubella vaccine in 1991, immediately after the birth of her second child, a boy, whom she nursed for seven months.

Mother states: "*my health problems began after his birth*". The boy *"was happy and talking until his MMR at 15 months. He has leaky gut symptoms (2), digestive difficulties and candida."*. This boy was diagnosed with autism and has received 12 monthly infusions of IVIG, with good clinical results reportedly. His rubella titers were elevated initially, but came down towards normal after the infusions.

The oldest boy, born in 1990, is in good health and has been immunized.

Case 12: Mother received rubella vaccine postpartum *"while in the hospital"*. She is now

"starting with arthritis." Her only child, a boy, born May 1996, was breast fed for 13 months. He has severe reactions to most foods, and needed a rotation diet. He has not been immunized and shows no signs of autism.

Case 13: Mother received rubella vaccine in 1993, at the six-week postpartum check-up, while she was breast-feeding. She is now 35, and claims to be *"extremely arthritic in my legs, have been since the vaccine"*.

The child, a girl, born May 1993 has received all her immunizations and does not appear to be autistic.

However, she has been diagnosed with Mc Cune Albright Syndrome and presented with precocious puberty, hyperthyroidism and a cystic ovarian tumor. Her right ovary and tube were surgically removed.

A second daughter, born 6/94 was diagnosed with Kawasaki Syndrome, three weeks after her 15 months immunizations. She was treated with IVIG infusions but went on to develop an aneurysm of her left descending coronary artery. She has *"slow motor skills"* and attends a special early childhood program.

Case 14: Mother received an MMR booster on 12/18/1991, two days after the birth of her first child, a girl, whom she only breast fed for 3 to 4 days.

Thirteen months later, she became pregnant with her second child. This boy was breast fed for two days only, and was routinely immunized. He received his first MMR at age 12 months, started with symptoms between 16 and 20 months, and was later diagnosed with autism. He is due for his second MMR vaccine. The mother claims that she has developed an immune disorder, and that she has a positive ANA. The older girl is well and has been immunized.

Case 15: Mother had MMR vaccine in 1993. She failed to develop adequate rubella titers, and was given another MMR booster in 1997, shortly after she delivered her second child, a daughter, who has been immunized and seems normal to date.

The oldest child, a boy born 12/7/1993, received one hepatitis B vaccination, and all his scheduled HIB, DPT and polio vaccines, as recommended, and without apparent immediate reaction. He received his first MMR at age 15 months. Mother reports that he started developing symptoms suggesting autism at the age of 18 months, and that his symptoms progressed, and became more marked, till the diagnosis of autism was confirmed. He has not received a second MMR.

Case 16: Mother received a rubella vaccine booster three days after the birth of her first child, a girl born 2/22/1992, who is well. The subsequent child, a boy, was not breast fed. He received his first MMR vaccine at 14 months of age, and his second at age 4 ½ years. He has autism and his symptoms reportedly started at age 22 months.

Case 17: Mother was given a rubella vaccine booster shortly after the delivery of her first child who was born April 5, 1993. This girl has been immunized and is well. The following child, a boy, born 10/19/1994, was not breast-fed. He was routinely immunized and seemed well. At age 18 months, he received his first MMR vaccine. Parents noted unusual symptoms starting age 20 months, and the child has now been diagnosed as PDD/NOS. The third child, a daughter, born 7/28/1997, is well and has been immunized.

Case 18: Mother received a rubella vaccine booster shortly after delivering a son. This young man born 2/18/1986 has been diagnosed as having Asperger's Syndrome (AS).

Case 19: Mother received an MMR vaccine on 1/6/1991, two days after the birth of her first son who is healthy, has no developmental problems and has been routinely vaccinated. A second son, born 9/2/1992 was normal until the age of 18 months when he received his first MMR. He reportedly started with autistic symptoms within two months and the diagnosis of autism was later confirmed.

Case 20: Mother received an MMR booster in 1982 when she resumed her college education**.** In 1991, she was still rubella-susceptible and was given another MMR booster in January 1991, after the birth of her first child a boy who is being treated for Attention Deficit Disorder but who according to the mother has some autistic traits. Her second boy born in December 1992 received his first MMR vaccine at the age of 18 months, and was diagnosed with autism around the age of 33 months. A younger sister is developmentally normal but has allergies and eczema. The mother was found to be immune to rubella in 1992 but was told she was again rubella-susceptible in 1994.

Case 21: Mother, who is a physician, received a rubella vaccine immediately after the birth of her first child in 1989. She acquired rubella immunity and the boy seems developmentally normal.

A second son born in 1993 was diagnosed with autism at the age of three.

Case 22: Mother received an MMR vaccine shortly after she delivered her first child, a girl who is in good health and seems neurologically intact. The next child also a girl, who was conceived eight months after the mother's vaccination, exhibited autistic symptoms before her first birthday, and has been diagnosed with autism.

Case 23: Mother had a rubella titer of 9.2 during her first pregnancy. She delivered prematurely on October 1, 1993 and because her titer was below 10, she was given an MMR vaccine on October 3, 1993. The child, a girl, stayed in the nursery for 34 days but has developed normally and is doing well.

A second daughter was born 3 to 5 weeks prematurely on 1/15/1996. She was breast-fed for 6 months. She uttered a few words before her first birthday. On January 20, 1997 she received the MMR, HIB and Varicella vaccines. Her speech was noted to be quite

delayed by the age of 18 months, and she soon thereafter developed severe behavioral difficulties. A diagnosis of autism was confirmed in October 1998.

The mother's rubella titer in July 1995 was 12.3

Case 24: Mother, who had been previously vaccinated, received a rubella vaccine booster on 8/15/1989, less than 24 hours after the birth of her first child. This boy was not breast-fed. He had G-E reflux, needed several formula changes and was constipated, but he appeared to be developing normally in the first year of life. He received his first MMR on 11/16/1990. According to the mother he appeared to interact much less with his surroundings by the time he was eighteen months old. His speech decreased and he was diagnosed with autism.

The second child a girl is 8 years old and is sensitive to gluten and Casein. She has several educational issues and is being evaluated for ADD.

Case 25: Mother received a rubella vaccine in 1979.

She delivered her first child in 1986 and received a second rubella vaccine.

In 1992, she delivered a second child and was given yet another rubella vaccine. This last child was noted to have speech and other problems and was diagnosed as having Asperger's Syndrome.

Discussion

Methodology

A prospective study of the general population is not feasible, and credible retrospective studies would have to compare matched groups:

- ✓ With and without autism
- ✓ With and without maternal re-vaccination
- ✓ With and without children's vaccinations
- ✓ And any variations thereof.

Identifying, selecting, and contacting such large groups would require a huge organization without any assurance of a large-scale response. The methodology used was the only one possible under the circumstances. In any case, the findings are impressively meaningful by themselves and in spite of any possible statistical bias.

General Discussion

In a very short time, and with limited research, twenty five families were identified, where the mothers were vaccinated in the postpartum period. Fourteen mothers received the rubella vaccine and eleven the MMR vaccine. Twenty cases were from the United States, four from the United Kingdom and one from Australia.

Twenty of the twenty five families (80%) report having children with autism, AS or PDD. One of these families, (**Case 9**), has two affected children, and the younger child, who is less affected, has not received the MMR vaccine. In another family **(Case 20)** there is one diagnosed and one suspected child with autism.

In nine cases, the child born immediately before the mother's booster developed autism. In ten others, that particular child was spared but the following child was diagnosed with the disease and in one case it was a previous child who was affected.

If there was a mother to child vaccine virus transmission in **cases 3 & 24**, it was not through breast milk, and it *could* have been through direct contact.

In two instances **(Cases 16 & 17)** where the mother did not breast-feed, the child born just before the maternal booster was normal. However the following child has autism.

In five families (**Cases 4, 5, 6, 12, and 13**) the children who were not diagnosed with autism report unusual problems, and in one (**Case 6**), the child seems to have autistic tendencies. In another (**Case 12**), the intact and only child has not received any MMR vaccine.

The first girl in **case 9** who was born just before mother's vaccination was much more affected with the disease, than her younger sister born four years later.

Several mothers did not develop rubella antibodies in spite of repeated vaccinations.

Symptoms of immune diseases have been reported in many families.

Gender distribution. (10)

Of the children born just before mother's vaccination and who developed autism seven were males, one was a female and in one case, the sex of the child was not listed.

Among the ten cases where it was the subsequent child who developed autism, there were eight males and two females.

Cases 5, 10, 13, 14, 15, 16, 17, 22, 23 represent situations where the children, all girls, whose births immediately preceded a maternal live virus vaccine booster, did not exhibit symptoms of autistic spectrum disorders. However some of them have developed immune, educational or unusual problems.

In **cases 10, 14, 16, and 17** the subsequent male child was diagnosed with autism.

In **cases 5 and 13**, the girls who followed did not develop autism, while in **cases 22 & 23,** they did.

In **case 15**, it was the preceding child, a boy, who had the syndrome.

Conclusions

In spite of it's statistical imperfections, this small study reveals new findings, which can not and should not be all blamed on coincidence and /or sample bias. It is hoped that it will prompt the vaccine manufacturers and the regulatory agencies to review this situation and their present recommendations with an open mind.

The routine administration of a live virus vaccine booster during the postpartum period to women who have previously been vaccinated, and yet have remained rubella-susceptible, should be seriously reconsidered.

It seems that women, who do not develop protective titers to rubella, after their initial vaccination and booster, have some immune difficulty of their own, which they may transmit to their children. It is most likely that their continued rubella susceptibility is not due to a problem with the vaccine, and therefore it seems reasonable not to attempt to correct it by the administration of more boosters.

In this study, re-vaccinated mothers seem to be developing unusual problems, and many have remained rubella-susceptible.

Their children also seem to have an inordinate number of difficulties.

Twenty out of the twenty five families have at least one child with autism.

Autistic symptoms often started shortly after the children were vaccinated.

Health providers should clearly explain to mothers that at least the rubella vaccine virus would be excreted in their nose, throat and breast milk, when obtaining "informed consent",

Serious research on whether measles vaccine virus is passed from mother to infant through breast milk should be undertaken.

The postpartum vaccination of women with live virus vaccines should be promptly and thoroughly reviewed.

Independent research looking into all possible causes of autism is imperative.

Click here for "Autism : Is there a vaccine connection? Part II"

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A second study, Part II on Intrapartum Vaccination with attenuated live virus vaccines is also being published at this time (11).

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Some of the above statements may not represent the views of organizations to which I belong.

This study is dedicated to all the wonderful mothers of children with autism. FEY

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Home