

Ronald M. Cyr, MD

Associate Professor, Department of Obstetrics and Gynecology and Reproductive Medicine, College of Human Medicine, Michigan State University, Lansing, Michigan

Disclosure: Ronald M. Cyr, MD, has disclosed no relevant financial relationships.

## From Medscape Ob/Gyn & Women's Health The Curious Case of a Child Who Looked Like a Spotted Dog

Ronald M. Cyr, MD

Posted: 04/15/2010

### Case Report

---

*In the early part of August 1841, I was requested to attend the wife of an innkeeper, in labour with her eighth child. She was a strong, healthy woman, aged about forty-seven. The os uteri was dilated to the size of half a crown [the Crown was a silver coin measuring 39 mm in diameter and worth 5 Shilling (1 £ = 20 Shilling)]; membranes unruptured; vertex presentation. The labor being tedious, it was necessary to rupture the membranes, which, from their toughness, and not yielding to the fingernail, was effected by a quill. There was much mental excitement during the greater part of the labor. Fearing cerebral congestion, and from the rigid state of the os uteri and the perineum, it was almost decided that venesection [phlebotomy] should be had recourse to. Though repeatedly told all was right, she persisted in a contrary opinion. As her pains increased, so did her ideas, that her child was like the spotted dog by which she had been frightened in the kitchen; as it was always before her eyes, night and day. (These were the words of the patient.) She had scarcely uttered those words, when, by a powerful contraction of the uterus, a fine full-grown female child was expelled. Before the child was taken from under the bedclothes, the patient distinctly said these words in the presence of the nurse and a second attendant "My child is marked like Troughton's dog (the spotted), and at the back of the neck where the black one held it." On bringing the child to the light, such was the fact; only three or four spots about the size of a sixpence on the face, the rest of the body beautifully marked with black spots varying from the size of a pea to that of a sixpence, with the exception of the back of the neck, which had a brown black appearance covered with hairs, extending about two inches and a half across the neck and shoulders, and one inch and a half down the back. It appears from the patient's statement, that about the period of her third month of pregnancy, she was crossing the kitchen with a pint of beer, when a black dog and a spotted terrier, then lying under the table, began to fight close to her feet; and in the fright turning round, she saw the black dog seize the other by the back of the neck: a chillness came over her, and she felt ill all the day. What is singular, her last two children were born marked from mental impressions made (as she believed) about the third month of each pregnancy; therefore, she was more convinced that she was to have a spotted child this time. The child is living, and very much admired. The spotted dog frequently passes my house; many persons call at the inn for a pint of beer as an excuse to see the rare spotted lass.<sup>[1]</sup>*

#### Interesting Historical Facts From This Case Report

**Amniotomy:** Gloves were not routinely worn for vaginal examinations until well into the 20th century. The index and middle fingers were lubricated with lard, butter, or olive oil; midwives usually kept one fingernail longer than the others for amniotomy.

**Venesection:** The removal of blood by phlebotomy or leeches was a mainstay of medical therapy for "plethoric" conditions from the days of Hippocrates until the late 1800s. Physicians believed that suppressed menstrual blood served to nourish the fetus; many of the complaints of early pregnancy were attributed to an excess of retained blood, and bleeding was commonly advised. This technique was popular for the treatment of eclampsia until the early 1900s because it rapidly lowered the blood pressure.

Question: Is this a case of

1. Hairy nevus syndrome?
2. Maternal impression?
3. An April Fool's joke?

Answers:

1. Images of "hairy nevus syndrome" available online match the description of the newborn in this case.<sup>[2,3]</sup>
2. Mr. WJ Tubbs, a physician from Upwell [in Norfolk, approximately 100 miles north of London, United Kingdom], introduced the preceding case report with these remarks:

For the facts of the following case, which has recently occurred in my practice, I can vouch; though how far they may tend to support the opinion long controverted, but adopted by many, that the effects of maternal fright may be developed in the organization of the fetus in-utero, I must leave to your numerous readers to decide.

3. This is not a joke. Hundreds of cases of purported maternal impression were published in reputable medical journals and textbooks until a century ago. Belief in the effects of maternal imagination on fetal development was so widespread in England that the public, and many medical men, were duped by a famous hoax in 1726.

#### **Mary Toft: The Woman Who Gave Birth to Rabbits**

Toward the end of 1726, reports that a woman had delivered 17 rabbits captured the public imagination in England, prompting a Royal enquiry that destroyed the reputation of several eminent doctors -- and enhanced that of the physicians who finally exposed the hoax. Hundreds of books, caricatures, and articles -- factual and satirical -- have reviewed every detail of this business.

Seeking fame and fortune as a side-show attraction, Mary Toft conspired with her husband and others to insert parts of dead rabbits into her vagina and maintain that these had come from her uterus. Her claim was bolstered when she described how, after encountering rabbits early in her pregnancy, but being unable to catch any, she dreamed of rabbits and became fixated with the idea of eating their meat -- a luxury beyond her humble means. Seventeen weeks later, she developed crampy abdominal pain, vaginal bleeding, and passed some fleshy tissue that looked like rabbit. [The gestation period of rabbits is only about 30 days.] Although described as uneducated, she was able to persuade John Howard -- an experienced local man-midwife -- that she had indeed delivered rabbits. Howard witnessed several other "deliveries" and called upon Mr. Nathaniel St-André, a surgeon and anatomist at the court of King George I in London, to verify this extraordinary occurrence. St-André was soon among the believers, and he wrote a pamphlet about Mary Toft that caused a great sensation in London. The King sent Sir Richard Manningham, a respected obstetrician, to investigate further. Under closer scrutiny, Mary was soon exposed as a fraud; she was prosecuted as a "vile cheat and impostor" and spent a short time in jail; Howard, St-André, and other duped professionals scrambled to salvage their reputations (Figure). In the words of SA Seligman: "Never can the Medical Profession have been made to appear so ridiculous in the eyes of the general public, and indeed of each other..."<sup>[4]</sup>

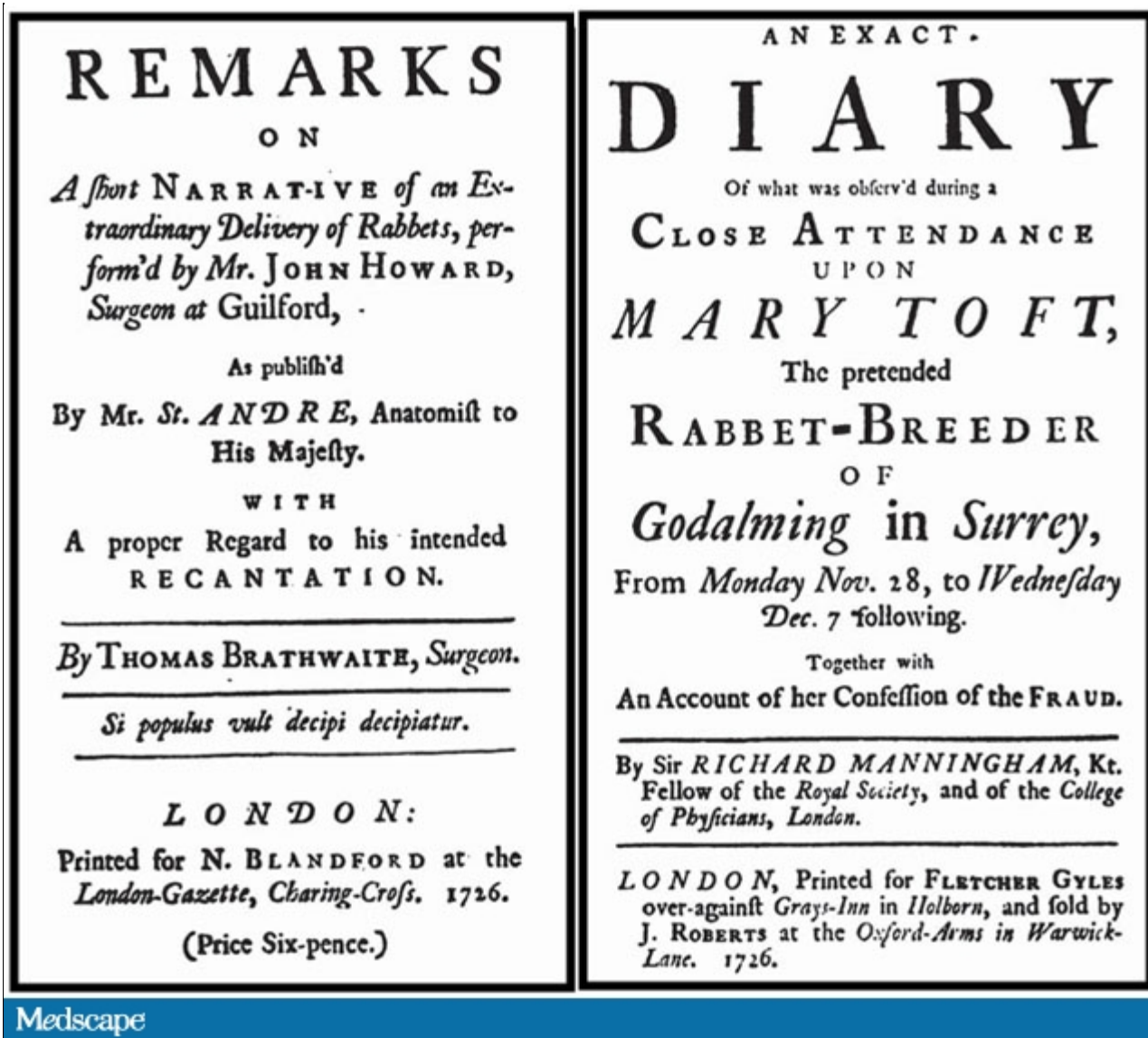


Figure. Contemporary publications about the case of Mary Toft. From Cumston CG. *Am J Obst Dis Women Child*. 1913;68:56.

### Maternal Impression

A belief in maternal impression dates back to antiquity and is found in all societies. The literature on this subject is voluminous: in an 1895 review of teratogenesis, John William Ballantyne cited almost 400 references between 1670 and 1894 attributing various human malformations to specific events experienced during early pregnancy.<sup>[5]</sup> Shortly after the Toft saga, James Blondel, a physician in London, attacked the theory of maternal impression in a 106-page pamphlet entitled: "The strength of imagination in pregnant women examined: and the opinion that marks and deformities in children arise from thence, demonstrated to be a vulgar error." Although his views were disseminated widely, over a century later Thomas Bull would write:

The supposed influence of the imagination of the mother upon the child in her womb is an error still popularly current: and though reason, experience, and anatomical knowledge, concur to refute this notion, it is received by many as an established truth, and tends more than any other delusion of the mind during pregnancy, to render the female truly wretched.<sup>[6]</sup>

Bull cites the famous physician William Hunter who, after interviewing 2000 women who delivered babies at his London hospital, found not a single instance supporting the theory of maternal impression.

Writing from Kansas in 1906, Edwin Taylor Shelly, MD discussed the role of American obstetricians in keeping the maternal impression superstition alive.<sup>[7]</sup> Of the references cited in Ballantyne's article, 170 articles that were published between 1839 and 1894 were by American authors, including such eminent men as Fordyce Barker (New York, NY), Matthew D. Mann (Buffalo, New

York), RAF Penrose (Philadelphia, Pennsylvania), and AF King (Washington, DC). Shelly wrote:

Is it not a curious psychologic phenomenon that men who know enough to write lucid scientific chapters on the development of the embryo and fetus can defend and disseminate the ridiculous maternal impression superstition? And yet we know they do. In fact, not a single American text-book on obstetrics issued during the past five years and intended for medical students and physicians combats this theory, but, on the contrary, it is upheld in all of them, with one or two exceptions in which the subject is not mentioned at all.<sup>[7]</sup>

Shelly quotes from Barton Cooke Hirst's *Textbook of Obstetrics* [Hirst was the Professor of Obstetrics at the University of Pennsylvania in Philadelphia]:

Maternal impressions may affect the embryo or fetus... There are well-authenticated cases of congenital defects or peculiarities which bear too startling a resemblance to the cause of the impression upon the mother during pregnancy to be dismissed as mere coincidences.

Shelly cites a few more examples of prominent "maternal impressionists," but gives Dr. Joseph Bolivar DeLee (Chicago, Illinois) credit for repudiating the doctrine in his obstetric textbook for nurses. "Unfortunately," he continues, "very few medical men or medical students ever see a text-book for nurses, and we are therefore confronted with the dismal prospect that the medical profession will probably continue to get its information on this popular medical superstition from the old granny twaddle on the subject found in its own obstetric textbooks."

Andreas G. Pohlman, of Indiana, concluded his 1911 paper on maternal impression with these words:

The doctrine of maternal impression has four strong factors: its antiquity; its ubiquity; its iniquity and its unquestionable lack of proof. After all, the human being is more superstitious than he will openly admit, and perhaps P. T. Barnum, who capitalized credulity, should be accounted some word of authority in his statement: *The public likes to be humbugged*.<sup>[8]</sup>

## References

1. Tubbs WJ. Influence of mental impressions on the foetus in utero. *Prov Med Surg J*. 1842;5:268-269.
2. Hairy nevus syndrome (photograph). Available at: [http://images.google.com/imgres?imgurl=http://image06.webshots.com/6/5/35/29/79453529wmDxGs\\_ph.jpg&imgrefurl=http://travel.webshots.com/photo/1079453529044703596wmDxGs&usg=\\_\\_cMkpCNF6gHJzBU2RbG4PhdsykHI=&h=800&w=600&sz=85&hl=en&start=7&um=1&itbs=1&tbnid=FUU](http://images.google.com/imgres?imgurl=http://image06.webshots.com/6/5/35/29/79453529wmDxGs_ph.jpg&imgrefurl=http://travel.webshots.com/photo/1079453529044703596wmDxGs&usg=__cMkpCNF6gHJzBU2RbG4PhdsykHI=&h=800&w=600&sz=85&hl=en&start=7&um=1&itbs=1&tbnid=FUU) Accessed April 1, 2010.
3. The New York Times. Congenital hairy nevus. 2007. Available at: <http://www.nytimes.com/imagepages/2007/08/01/health/adam/2901Congenitalnevusontheabdomen.html> Accessed April 1, 2010.
4. Seligman SA. Mary Toft - the rabbit breeder. *Medical History*. 1961;5:349.
5. Ballantyne JW. Teratogenesis: an inquiry into the causes of monstrosities. *Trans Edinb Obs Soc*. 1895-96;21:220,258.
6. Bull T. *Hints to Mothers*. London, UK: Longman, Orme, Browne, Green & Longmans; 1839:307.
7. Shelly ET. The maternal impression and why it survives. *Am Practitioner News*. 1906;40:415-420.
8. Pohlman AG. Maternal impression. *Proc Indiana Acad Sci*. 1911;65-70.