Conjoined twins separated after long legal battle

Clare Dyer *legal correspondent, BMJ*

A 20 hour operation to separate the conjoined twins Jodie and Mary at St Mary's Hospital in Manchester ended at 5 am on 7 November with Jodie, the stronger twin, surviving but her sister Mary dead. The operation, carried out by a team of 20 doctors and nurses, followed a three month legal battle watched by the world to decide their fate after their birth at the hospital in August to parents from the Mediterranean island of Gozo.

The twins' parents, whose identities were protected by an injunction, had opposed the operation, wanting nature to take its course. Without an operation the prognosis was death for both twins, who were joined at the abdomen. But whereas surgery gave Jodie the chance of a reasonable life, her sister, who had a primitive brain and no functioning heart or lungs, faced an inevitable death. A High Court judge ruled in August that the operation could go ahead despite the parents' objections. Three appeal court judges upheld the ruling in September, and an eleventh hour attempt by the ProLife Alliance to take the case to the House of Lords for a final appeal failed in the High Court and appeal court last Friday.

Six hours after the operation ended, the hospital said in a statement that Jodie was in a "critical but stable condition." Although it had been certain that Mary would die—indeed the central issue in the Court of Appeal was whether it was lawful to kill one twin to save the other—the statement went on: "Unfortunately despite all the efforts of the medical team, Mary sadly died." The twins were joined at the abdomen with fused spines, and arms and legs at right angles to their torso. Jodie has a normal brain, heart, lungs, and liver, but she shared a bladder with her sister.

Jodie's degree of disability is uncertain, but doctors hope she will be able to walk, have children, and have a normal life span. She will have to undergo further surgery in the future. Mary was said to have been "draining the life" out of Jodie, whose heart and lungs had kept both babies alive. In the last 10 days of October, there was some deterioration in Jodie's heart function. Last Friday Bruno Quintavalle, director of the ProLife Alliance, asked the High Court to let him replace the Official Solicitor, Laurence Oates, as Mary's guardian, to allow him to appeal to the law lords. The appeal court had granted permission for a further appeal but Mr Oates had decided not to take it up after learning that the parents had become resigned to the operation. The president of the High Court's family division, Dame Elizabeth Butler-Sloss, rejected Mr Quintavalle's application, ruling that Mr Oates had acted with "complete propriety." Two appeal court judges refused permission to appeal against her decision. The parents have agreed a six figure deal with Granada TV for an interview on the *Tonight* programme with Trevor MacDonald, to provide a fund for Jodie's future medical care. □

Parkinson's disease linked with pesticide

Abi Berger *BMJ*

A commonly used organic pesticide called rotenone has been linked with Parkinson's disease. The cause of most cases of the disease is unknown, but epidemiological studies have suggested that chronic exposure to environmental toxins—such as pesticides—may be responsible for the degeneration of neurons containing dopamine. Now Dr Tim Greenmyre and his colleagues at the department of neurology at Emory University in Atlanta have shown that rotenone, administered intravenously over several weeks, reproduces the major features of Parkinson's disease in rats (*Nature Neuroscience* 2000;3:1301-6).

Postmortem studies suggest that the pathogenesis of Parkinson's disease is initiated by damage to the mitochondria. Previously the best animal model for Parkinson's disease was the "MPTP model," where mice or monkeys are treated with a drug called 1,2,3,6-tetrahydropyridine (MPTP) and the features of Parkinson's disease are faithfully reproduced. The toxicity of MPTP occurs because its derivative MPP+ inhibits one of the mitochondrial enzymes. The team decided to test rotenone because it is known to inhibit the same mitochondrial enzyme as MPP+. This study does not prove that rotenone causes Parkinson's disease in humans, but it does support the hypothesis that exposure to pesticides may contribute to the brain damage seen in the disease. □

AP PHOTO/MARY ANN CHASTERLAIN

A Californian farmer sprays his peach trees with pesticides

***BMJ* has a new ethics committee**

The *BMJ* has formed a new ethics committee. (*BMJ* 2000; 321:720) Members were recruited from nearly 150 applicants, and their collective expertise spans ethics, law, research, clinical medicine, medical publishing, and journalism. The committee will meet at least four times a year and will report its deliberations and decisions in the *BMJ*.

The members are Alexander McCall Smith, professor of medical law, University of Edinburgh (chairman); Derick Wade, professor of neurological disability, University of Oxford; Liz Wager, head of international medical publications (UK), GlaxoWellcome; Peter Singer, professor of medicine, and director of joint centre for bioethics, University of Toronto; Anne Sommerville, head of medical ethics, BMA; Tom Wilkie, adviser in bioethics at the Wellcome Trust and editor of *Scientific Computing World*; Jeffrey Tobias, consultant in radiotherapy and oncology, University College Hospital, London; Richard Smith, editor, *BMJ*; Alison Tonks, assistant editor, *BMJ*.