Vaccines and Abortion

There are at least 2 cell lines from aborted human fetuses used to make vaccines: The attenuated rubella virus strain, RA 27/3, was obtained from a rubella infected aborted human fetus and is grown on the WI-38 cell line obtained from tissue from a human fetus who was aborted in 1961. (ref. Fred DeMiranda)

According to an official of GlaxoSmithKline Vaccines, the MRC5 cell line was derived from lung tissue of a fetus aborted from a woman “advised to terminate her pregnancy for [unspecified] medical reasons” in the 1960’s. This cell line has been used to produce vaccines to prevent “rubella, varicella, measles, mumps, and hepatitis”. GSK is currently switching production of oral polio vaccine used in some other countries (only killed vaccine is now used in the United States) from the Vero cell line derived from monkey kidney cells to the MRC5 cell line. GSK believes “that to support global demand, the MRC5 is a better substrate for oral polio vaccine”.

The Physicians Desk Reference (2004) states that measles and mumps vaccines are produced in chicken embryo cell lines; the Red Book qualifies this with the phrase “in the US” for measles but not for mumps. It was not stated in the Red Book how measles and mumps vaccines are produced in other countries.

Hepatitis A vaccine is an attenuated (weakened) live virus vaccine “propagated in the MRC5 human diploid cells” prior to being inactivated; Hepatitis B vaccine does not use human cell lines in its production.

In 2003, there were three safe rabies vaccines available in the US: Human Diploid Cell Vaccine (HDCV) Imovax, produced in human diploid cells from the MRC5 cell line. Purified Chick Embryo Cell (PCEC) RabAvert, and Rabies Vaccine Adsorbed (RVA). When HDCV was developed, it was hailed as being much safer than the alternatives then available, and it is safer than the old duck embryo vaccine, but PCEC and RVA are not associated with the Type III hypersensitivity reaction that plagues 6% of people receiving booster doses of HDCV when it was used for pre-exposure prophylaxis and both HDCV and PCEC have been associated with a couple of cases of Guillan-Barre Syndrome. PCEC does carry less than 1 in 1,000,000 per dose risk of encephalitis and of other neurologic disorders and less than 1 in 5,000,000 risk of anaphylactic shock and is not the first choice in patients allergic to eggs or neomycin. In June 2004 HDCV was no longer available in the US after its manufacturer stopped producing it after a couple of lots were recalled. In Georgia, those 2 Health Districts that carry rabies vaccine are required by the State to order the least expensive vaccine.

Varicella vaccine production involves both human fetal cell lines and also a human embryonic cell line: “The virus was initially obtained from a child with natural varicella, then introduced into human embryonic lung cell cultures, adapted to and propagated in embryonic guinea pig cell cultures and finally propagated in human diploid cell cultures (WI-38). Further passage …was…in human diploid cell cultures (MRC-5)”
3 Personal communication, December 16, 2003
4 Personal correspondence from Jo LeCouilliard, Vice President, GlaxoSmithKline Vaccines, US, One Franklin Plaza, P.O. Box 7929, Philadelphia PA 19101, (215)751-4000 phone; (215)751-3400 fax, to Patricia Lee June, MD dated December 16, 2003.
6 PDR 2004, Havrix p. 1513; Twinrix p. 1650; Vaqta p. 2096 is an attenuated strain which is then “grown in MRC5 diploid fibroblasts” and then inactivated.
9 PDR 58th ed, 2004, RabAvert, pp. 1167-1170. This is the only rabies vaccine in the 2004 PDR. (RVA is listed in neither the 2003 nor the 2004 PDR.)
10 Phone conversation with pharmacist, Georgia Health District 8-2, June 10, 2004.
11 PDR 2004, Varivax, p. 2099