



RISKS DURING PREGNANCY

Adverse pregnancy outcome is often of great concern to women who have certain exposures during their pregnancy. Specifically, many women have concerns regarding X-rays, radiation, and anesthetic agents.

DIAGNOSTIC SCANS

Most diagnostic X-rays have little or no fetal risk. According to the American College of Radiology, there is no single diagnostic procedure that results in enough radiation to cause detriment to the developing fetus. Between 8 and 15 weeks, the risk of severe mental retardation is approximately 4% for an exposure equal to 10 rads and increases to approximately 60% for an exposure of 150 rads. At 16 to 25 weeks there is a slight risk. Between 0 to 8 weeks and less than 25 weeks, there is no potential harmful effect. No harmful effects on the fetus can be shown for an exposure to 5 rads or less of radiation.

MRI is currently being studied for safety. To date, there is no evidence that any adverse fetal outcomes exist with MRI and pregnancy. Since this form of imaging is still not fully studied, it is not recommended that it be used in the first trimester.

To date, ultrasound has been shown to be safe in pregnancy.

RADIATION

There are approximately 4000 pregnant women per year who undergo radiation treatment for cancer therapy. The risks and exposures to radiation becomes a concern for these women and their fetuses. It is of extreme importance that you and your radiation oncologist talk about the risks and benefits of radiation therapy while you are pregnant. He or she may plan ways to shield your abdomen during treatment.

ANESTHESIA

Large numbers of women may be exposed to anesthetic gases during pregnancy. These include women who are having procedures performed, as well as women who work in professions where they are exposed to these gases. Some concern exists regarding inhaled anesthetic gases and adverse pregnancy outcomes. This has only been shown for repeated exposure to these gases. In the first trimester, rate of spontaneous miscarriage increases for women with chronic exposure. Additionally, there are questions regarding possible congenital anomalies and chronic exposure throughout the pregnancy. Because of this, if you work in an operating room

environment, you should be sure that a gas-scavenging system is in place, and may consider transferring to another area if possible.

There does not appear to be an increased risk of congenital malformations in infants born to mothers who have undergone general anesthesia.

VIDEO DISPLAY TERMINALS

As computers have become more and more commonly used in our society, the issue of exposure to video display terminals has come up. Early studies showed a questionable increased risk of spontaneous abortions in people who had chronic exposure to video display terminals. Several more recent and complete studies have been done. They suggest no increased risk of adverse pregnancy outcomes with exposure to video display terminals.

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