

*If you have
any questions,
please ask your
physician or
nurse.*

Low-Dose CT During Pregnancy

Your physician believes that an X-ray of your abdomen (belly) and pelvis is the best way to find the cause of your abdominal pain. This imaging test is called a computed tomography (CT) or “CAT” scan. Because you are pregnant, it is important to know that a CT scan of your abdomen will expose your unborn baby to radiation. To make sure the amount of exposure to your unborn baby is small, a CT scan with lower amounts of radiation will be used. This brochure will describe the benefits and risks of the low-dose CT scan and other options.

Benefits of the low-dose CT scan

When a pregnant woman has severe abdominal pain, it is very important to find out the cause of the pain quickly. A CT scan can capture an image of your internal organs in minutes. This lets your physician evaluate your condition and determine the next steps for treatment right away. Any delay in diagnosing or treating severe abdominal pain could result in harm to you and/or your unborn baby.

A CT scan is the preferred test to identify problems in the abdomen and pelvis.

Risks associated with the low-dose CT scan

In general, side effects associated with radiation usually occur with high amounts of radiation exposure. For example, a high dose of radiation can slightly increase the chance of damage to an unborn baby’s cells. With a low-dose CT, the lowest amount of radiation will be used to do the test. This lower dose reduces the chance of damage to an unborn baby’s cells to nearly zero.

The risks associated with a low-dose CT scan are very small. They are similar to radiation-related risks that can be found with about 3 years of natural background radiation in daily living.

This CT scan requires the use of contrast, which is a liquid that highlights parts of the body in the scan. This improves the quality of the image so that your physician can detect problems. Contrast has not been shown to cause harm to unborn babies.

Other imaging options to the low-dose CT scan

In certain cases, different imaging tests may be used to find the source of your abdominal pain. Although these tests do not expose you and your unborn baby to radiation, they are not as fast or as accurate as a CT scan. This can cause delays in diagnosing your problem. Any delay in diagnosing your abdominal pain could result in serious harm to you and your unborn baby.

Magnetic resonance imaging (MRI)

An MRI scan takes longer to do than a CT scan and can take up to 1 hour to perform. The results may still leave questions. For example, if your physician suspects you have appendicitis and a normal appendix is not visible on your MRI, your physician will not have enough information to rule out appendicitis.

Ultrasound

An ultrasound is only useful when the internal organ(s) can be seen. If the internal organ is seen and is abnormal, an ultrasound is very accurate. However, if your physician suspects you have appendicitis, an ultrasound may not be able to show an image of your appendix. Again, your physician will not have enough information to rule out appendicitis.

If an ultrasound and/or MRI are done, but do not show clear results, a low-dose CT scan may still have to be done to give your physician the information they need.

Your physician has considered the risks associated with this test and believes it is in the best interests of you and your unborn baby to proceed with a low-dose CT scan.

Please discuss any questions you may have with your physician.

Northwestern Medicine – Health Information Resources

For more information, contact Northwestern Memorial Hospital's Alberto Culver Health Learning Center (HLC) at hlc@nm.org, or by calling 312.926.5465. Health information professionals can help you find the information you need and provide you with personal support at no charge.

For more information about Northwestern Medicine, please visit our website at nm.org.

Para asistencia en español, por favor llamar al Departamento de Representantes para Pacientes al 312.926.3112.

The entities that come together as Northwestern Medicine are committed to representing the communities we serve, fostering a culture of inclusion, delivering culturally competent care, providing access to treatment and programs in a nondiscriminatory manner and eliminating healthcare disparities. For questions, please call either Northwestern Memorial Hospital's Patient Representatives Department at 312.926.3112, TDD/TTY 312.926.6363 or the Northwestern Medical Group Patient Representatives Department at 312.695.1100, TDD/TTY 312.926.6363.

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