EUROPEAN ACADEMY OF DERMATOLOGY & VENEREOLOGY

Information Leaflet for Patients

Tattoos and radiological imaging

The aim of this leaflet

This leaflet is designed to help you know more about imaging in case you have one or more tattoos on your body.

WWW.EADV.ORG
INFORMATION LEAFLET FOR PATIENTS 2025

Tattoos and radiological imaging

If you have one or more tattoos and are scheduled for a radiological imaging exam—such as an X-ray, mammogram, ultrasound, MRI, or PET scan—it's important to know how tattoos might interact with these procedures. While most people with tattoos undergo imaging without any issues, there are a few things to be aware of.

General Advice

- Inform the Radiology Team:

  Always let the radiology staff know if you have tattoos, especially if they are located near the area to be imaged. This helps them interpret the images correctly and ensures your safety.
- Tattoo Location:

  Tattoos on or near the chest, back or upper arms may be relevant in case of mammograms

X-rays and Tattoos

X-rays pass through the body and create images of bones and some soft tissues. In most of the cases, tattoos do not interfere with X-ray imaging. However, on very rare occasions, tattoos might appear as shadows or artifacts on the image. Informing the technician helps avoid confusion during interpretation.

Mammograms and Tattoos

Tattoos on the breast or chest wall may show up on a mammogram. Pigment from tattoo ink that have migrated in a local axillary or intrammary lymph node may be visible on mammogram and can be mistaken for calcifications. If you have tattoos in this area, let your radiographer know in advance so they can interpret your images more accurately. However, it is likely that tissue sampling with a biopsy is necessary to rule out any malignancy.

Ultrasound and Tattoos

Ultrasound uses sound waves to create images and is not affected by tattoos in most cases. No special precautions are usually needed. In case of ultrasound of a lymph node, tattoo pigment deposition may be noted by ultrasound.

MRI (Magnetic Resonance Imaging) and Tattoos

MRI uses powerful magnets and radio waves, and this is where tattoos require the most attention. Some tattoo inks—especially dark colors like black and blue—may have electromagnetic properties. Tattoo pigments may cause disturbing artefacts in images in case of tattooed eyelids and MRI of the eyes, especially. Rarely, some individuals may experience slight warming or tingling sensation in tattooed areas during MRI. In exceedingly rare cases, sensation of burning or pain can be so severe that examination needs to be halted.

To minimize any risk, inform your MRI technician about all your tattoos, including small or older ones. During the examination, let the staff know immediately if you experience any unusual sensations, such as warmth, tingling, or discomfort. If needed, the technician may apply a cool compress to ease any symptom.

If symptoms remain mild and tolerable, the MRI can usually continue. However, if the discomfort becomes too intense, the examination may need to be stopped. In some cases, restarting the MRI may not be possible. If that occurs, the radiologist will consider alternative imaging techniques, such as a CT scan, depending on the clinical situation.

Tattoo removal—whether by surgery or laser—should only be considered in exceptional circumstances, and always in consultation with a medical professional.

PET Scans and Tattoos

PET scans involve radioactive tracers and are often combined with CT. Tattoos typically do not interfere with PET scans, but they can again cause confusion in image interpretation, in case of pigment uptake by nearby lymph nodes. Again, informing the radiology team is key. it is likely that tissue sampling with a biopsy is necessary to rule out any malignancy, depending on the reason why you are undergoing this exam.

I have no tattoos, but I had one or more removed by laser. Should I inform the radiologist?

Yes, you should inform the radiologist of any past tattoo removed and their past location on the body, as tattoo pigments may still be in draining lymph nodes and lead to possible confusion in interpretation.

EUROPEAN ACADEMY OF DERMATOLOGY & VENEREOLOGY

WWW.EADV.ORG
INFORMATION LEAFLET FOR PATIENTS 2025