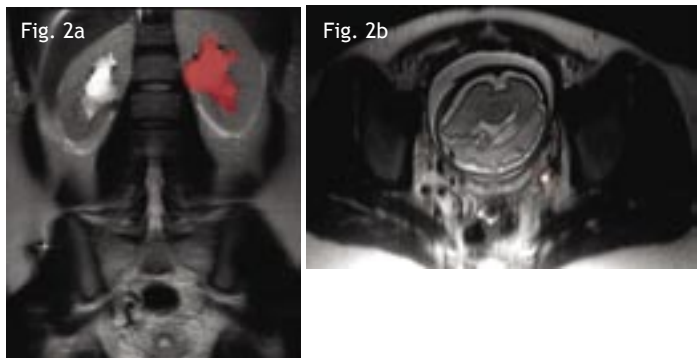
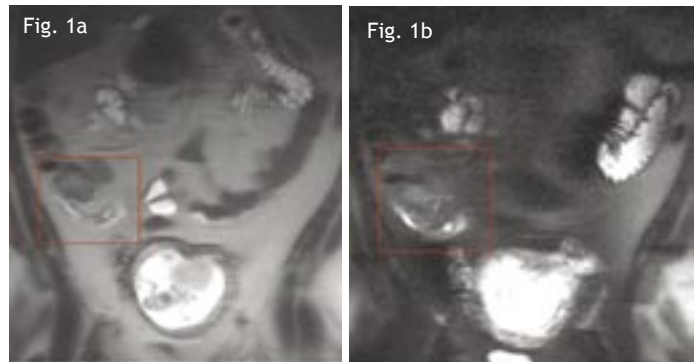


## MRI of Maternal Disease During Pregnancy

The advent of rapid breath-hold imaging a few years ago has greatly expanded the role of MRI in the diagnosis of abdominal and pelvic disease. MRI offers a no-radiation, kidney-friendly alternative to CT imaging, and is increasingly popular for imaging during pregnancy or in patients with renal insufficiency. In particular, MR imaging can be used to evaluate abdominal or flank pain in pregnant patients, and can accurately diagnose a wide range of pathology, including appendicitis and renal obstruction. The exam is approximately 30 minutes, and there is no radiation exposure to the mother or fetus. In most cases no intravenous contrast is used, and no pre-exam preparation is necessary.

**CASE 1:** The first case is a 37-year-old female with a 12-week pregnancy and right lower quadrant pain. Coronal HASTE MR images without (Fig. 1a) and with (Fig. 1b) fat saturation reveal a mildly dilated, inflamed appendix. Acute appendicitis was confirmed at surgery.

**CASE 2:** This case is a 29-year-old female with a 29-week pregnancy and bilateral flank pain. While ultrasound showed bilateral hydronephrosis, coronal (Fig. 2a) and axial (Fig. 2b) MR images demonstrate the level of left ureteral obstruction at the UVJ. Tiny obstructing stone passed with stent placement.



*Dear Colleague:*

*I'm pleased to send you the latest issue of "Update" from Evergreen Radia Imaging Center. Six times a year, we will send you information about the benefit of the state-of-the-art technology and expertise we provide. Your questions comments are welcome.*

*— Lloyd Stambaugh, MD, Medical Director,  
Evergreen Radia Imaging Center*

## MRI in Pregnancy at Evergreen Radia Imaging Center

### Indications

- Flank pain
- Abdominal or RLQ pain—possible appendicitis
- Indeterminate ovarian mass
- Pelvic mass versus fibroid

### Journal Update: Low Dose Rad

Human epidemiological studies demonstrate increased cancer risks from radiation doses above 100 mGy. [Risk of radiation-induced cancer at low doses..., Doc of NRPB 1995;6(1)]; [UNSCEAR 2000. Sources and effects of ionizing radiation... Vol 2, Annex G]; [Cardis et al, Radiat Res 1995;142:117-32]

However, there is evidence for a small increase in childhood cancers following fetal doses as low as 10-20 mGy. [Doll, Wakeford. Risk of childhood cancer from fetal irradiation. Br J Radiol 1997;70:130-9].

Radiation exposure from a single abdomen-pelvis CT is 10-20 mGy.

### Services at Evergreen Radia Imaging Center

- CT
- MRI
- X-Ray
- PET/CT
- Ultrasound
- Fluoroscopy/Pain Management

To schedule a PET/CT at Evergreen Radia, please call (425) 952-6111 or toll-free (877) 738-7226, or download a PET/CT referral form from <http://www.radiax.com/pdf/EvergrnRadiaPETImagForm.pdf> and fax the completed form to (425) 952-6110.

To schedule all other diagnostic procedures at Evergreen Radia, please call (425) 899-2831.

## EVERGREEN RADIA IMAGING CENTER

11521 NE 128th St., Suite 200  
Kirkland, WA 98034

(425) 952-6100  
[www.radia.net](http://www.radia.net)

## Did you know...?

- ❖ Evergreen Radia Imaging Center now offers non-contrast MRI exams on Saturday from 8:30 a.m. to 5:00 p.m. All other MRI exams are available Monday-Friday 6 a.m. to 10 p.m. To schedule a patient at Evergreen Radia, please call (425) 899-1844.
- ❖ Evergreen Radia is now ACR-accredited in both MR and US. This accreditation continues our commitment to high standards of quality and continuous improvement in imaging services.
- ❖ We can provide images on film or on CD to your office. To order, call Evergreen Hospital's film library at (425) 899-1828.
- ❖ We will deliver additional referral forms directly to your office. Just give us a call at (425) 952-6100.

## May is Melanoma/Skin Cancer Detection and Prevention Month!

### PET/CT is an excellent study for initial staging of melanoma or re-staging of suspected melanoma recurrence.

Due to the rapid metabolic rate of most melanomas, PET/CT is an excellent modality for detecting early metastatic spread, and is the modality of choice for initial staging of locally advanced melanomas with regional lymph node spread. In addition, a recent article looked at patients with early Stage III melanoma due to positive sentinel node biopsy. Four of 33 patients (12%) had true-positive PET scans for metastatic disease and were upgraded to Stage IV disease. This suggests there is a role for routine PET/CT staging of new Stage III melanomas—even with early subclinical regional lymph node spread. PET/CT is also used for restaging after treatment, or for suspected recurrence.

*(Eur J Nuc Med Mol Imaging, 4 Apr 06, Epub ahead of print)*

If you wish to learn more about the advantages of PET/CT or would like see case studies in which PET/CT imaging helped change patient management and treatment, please give us a call at (425) 952-6116. Our marketing specialist, Pamela Cregger, would be happy to stop by or schedule a meeting with you.

## Patient Satisfaction

Evergreen Radia provides imaging services to hundreds of thousands of patients each year. We're always interested in what our patients have to say. Here's just a few recent comments received through our patient satisfaction survey cards.

- ❖ Very comfortable and friendly atmosphere
- ❖ Your MRI techs are the best. They really helped me through my anxiety. Thank you, thank you!!
- ❖ The staff is fabulous-everyone is friendly and warm
- ❖ Positive experience -what a wonderful place
- ❖ All staff very friendly and take the time to make sure that you understand what is happening
- ❖ Arrived earlier than appointment time, however they got us in right in. Truly A++ service
- ❖ The care I received for my CT Angiogram was exceptional
- ❖ Always a pleasure to come to Evergreen Radia