


**AANS/CNS Section on Pediatric Neurological Section Quality Improvement Committee – 3.4.2025**

**IMAGING FOR SACRAL DIMPLE**

Responses obtained from email communication in answer to the Fall 2024 Pediatric Short Cuts. Please contact the AANS/CNS Peds Section QI committee if you'd like to provide your Institutional practices or guidelines regarding "imaging for sacral dimple".

Surgeon/Institution	Response
Julia Radic U of Saskatchewan (Canada)	Recommend following the choosing wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ). No imaging or follow up for dimples in the gluteal cleft/associated with the coccyx. For dimples above this, ultrasound ok for screening but generally prefer an MRI. Bundled MRI if less than 3 months old, to avoid sedation. Otherwise, offer MRI with sedation vs clinical follow up with MRI when old enough to avoid sedation as long as they remain asymptomatic. Urgent sedated scan if concerned for dermal sinus tract or symptomatic patient.
Jay Riva-Cambrin U of Calgary (Canada)	Recommend following the Choosing Wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ).
Albert Tu U of Ottawa (Canada)	Recommend following the Choosing Wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ). But many screening ultrasounds being done by primary care physicians despite these recommendations.
Roy Dudley McGill (Canada) And Jeff Atkinson McGill (Canada)	Recommend following the Choosing Wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ). Offer clinical follow up of patient until toilet trained and walking if family concerned to avoid imaging. But many screening ultrasounds being done by primary care physicians despite these recommendations.
Simon Walling Dalhousie University (Canada)	Recommend following the Choosing Wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ).
Vivek Mehta U of Alberta (Canada)	Have attempted to recommend following the Choosing Wisely Canada guidelines for sacral dimples ( <a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a> ), But many screening ultrasounds being done by primary care physicians despite these recommendations. Discussions with local radiologists to try and limit MRIs done, which can lead to more neurosurgery consults for opinions.

<p>Adrianna Ranger Western University, London (Canada)</p>	<p>Recommend following the Choosing Wisely Canada guidelines for sacral dimples (<a href="https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/">https://choosingwiselycanada.org/recommendation/pediatric-neurosurgery/</a>). Gives a printed hand out to parents with the list of references that support the recommendations, which helps to reassure parents.</p>
<p>Virendra Desai CHLA (USA)</p>	<p>MRI for all lumbosacral dimples except “simple” ones (pit inside gluteal cleft, no asymmetry, no cutaneous markers/appendages).</p>
<p>David Sandberg UTH (USA)</p>	<p>If low suspicion that it’s a congenital dermal sinus tract, then get an ultrasound.  If high suspicion or results of previously done ultrasound are concerning, get an MRI.</p>
<p>Jesse Winer OHSU (USA)</p>	<p>Imaging often done by primary care physician before they are referred to neurosurgery. Primary care physicians have a low threshold for getting imaging.  Local pediatric neurosurgery consensus on recommendations: no screening imaging for dimples below the gluteal cleft in the absence of any other syndromes/neurologic concerns.</p>
<p>Marike Zwienenberg UC Davis (USA)</p>	<p>Coccygeal dimple: no screening. Sacral dimple that are deep or the base not visible: Spine ultrasound if less than 3 months old, and MRI of lumbar spine if greater than 3 months old. Dimple at the top of the gluteal fold or higher or other dysraphic markers present: MRI of the lumbar spine</p>
<p>Joe Piatt Delaware Nemours (USA)</p>	<p><i>“In the complete absence of meaningful evidence, we do not have a consistent practice. Just this morning I messaged our new Division Chief in Urology to suggest that we develop a consensus pathway.”</i></p>
<p>Greg Albert Arkansas Children’s (USA)</p>	<p>Albert GW. Spine ultrasounds should not be routinely performed for patients with simple sacral dimples. Acta Paediatr. 2016 Aug;105(8):890-4. doi: 10.1111/apa.13422. Epub 2016 Apr 24. PMID: 27059606. <a href="https://pubmed.ncbi.nlm.nih.gov/27059606/">https://pubmed.ncbi.nlm.nih.gov/27059606/</a> Most have screening imaging done by primary care physicians despite these recommendations.</p>

**2 Don't image a midline dimple related to the coccyx in an asymptomatic infant or child.** 

Sacrococcygeal dimples (also called simple sacral dimples or sacrococcygeal pits) are common findings in newborns, with a prevalence of approximately 2 to 5%. They are not associated with any increased risk of occult spinal dysraphism (e.g., low lying conus, fatty filum, lipomyelomeningocele, split cord malformation, dermal sinus tract, etc.) compared with the general population of infants without sacrococcygeal dimples. There is therefore no need to investigate infants with this finding, with either ultrasound or MRI. Red flags for which investigating would be indicated include the presence of midline tuft of hair, sacral dimple or sinus tract above the gluteal cleft, hemangioma, dermal appendage, and/or a subcutaneous lump. The ideal choice for initial investigation (ultrasound or MRI) would depend on the specific cutaneous findings and clinical symptoms present.

**Sources:**

Albert GW. Spine ultrasounds should not be routinely performed for patients with simple sacral dimples. *Acta Paediatr.* 2016 Aug;105(8):890-4. [PMID: 27059606](#).

Kucera JN, et al. The simple sacral dimple: diagnostic yield of ultrasound in neonates. *Pediatr Radiol.* 2015 Feb;45(2):211-6. [PMID: 24996813](#).

Zywicke HA, et al. Sacral dimples. *Pediatr Rev.* 2011 Mar;32(3):109-13; quiz 114, 151. [PMID: 21364014](#).