



27th World Congress on Ultrasound in Obstetrics and Gynecology 16 – 19 September 2017, Vienna, Austria

Dear Behnaz Moradi,

Thank you for submitting an abstract for ISUOG's 27th World Congress. We have great pleasure in informing you that your abstract has been accepted for inclusion in a **Poster Discussion Hub (P)**.

Your poster must be prepared as a one single PowerPoint slide and you are invited to attend the chaired discussion session listed below and be available for questions should they arise.

Details of Poster Discussion Hub session:

Name of session: **P: Head, neck and bones**

Session date: **September 17, 2017**

Session time: **September 17, 2017 from 2:35 PM to 3:15 PM**

Session location (room): Please check the final program when you arrive onsite

Abstract title: **Evaluation of ossification timing of sacral vertebrae by transabdominal sonography in the second trimester of pregnancy**

Behnaz Moradi to be available at the discussion

Abstract reference number

Please take a note of your final abstracts number: **P09.05**.

This replaces the 7-digit number **2740211** allocated to your abstract upon submission.

Abstract text:

Your abstract text is detailed below. This will be sent to the publishers and will be printed as you see it. Please **check the details very carefully, particularly the title, authors and affiliations as it will not be edited.**

In the event that you notice a serious error in your abstract, please notify the Congress Secretariat before **Wednesday 14 June 2017**. After this date corrections cannot be guaranteed and may be refused.

Evaluation of ossification timing of sacral vertebrae by transabdominal sonography in the second trimester of pregnancy

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Objectives The aim of this research is to determine the timing of sacral vertebrae ossification in order to guide the clinicians to early and reliable diagnosis of sacral region anomalies like as caudal regression syndrome and delayed ossification in some skeletal dysplasia. *Methods* This cross-sectional study was carried out on 292 normal single pregnancies at gestational ages ranged 14 to 25 weeks. The sacral region was evaluated on a coronal plane, in spine up position. Changing probe orientation between sagittal and coronal planes during continuous viewing could help in confirming the presence of the ossification center. Then the level of the central and lateral ossification centers was recorded in each gestational age. *Results* Ossification occurred in a predictable caudal direction pattern. As evident in the table neural arch ossification centers were visualizes later (Table). S1 and body of S2 were visualized in all cases at 15-17 weeks+ 6 days and arch of S2 in all fetuses with 17 weeks of gestational age. Body of S3 was detected in all cases at 17 weeks and its arch at 20 weeks. All fetuses at 20 weeks of gestational age show sacral ossification in body and arch of S4. Ossification in S5 firstly was found at 18 weeks and progressively with a higher percentage during the following weeks of the gestational age (Figure). The gender of fetuses had no statistically significant impact on ossification timing. *Conclusions* These data show that by using recent high resolution ultrasound machines sacral vertebral ossification centers can be identified in earlier gestational age which can help in earlier detection of sacral pathologies

Speaker guidelines

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7/4/2017

Accommodation

Special rates have been negotiated at hotels in Vienna and Early bird discounts are available until 20 July; rooms cannot be guaranteed after this date. Please visit our website [here](#) for more information.

If you have any questions, please do not hesitate to contact us.

Yours sincerely,

The ISUOG Congress Team

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