CASE REPORT

AGE & SEX DETERMINATION OF FOETUS FROM ILIUM: A MEDICOLEGAL ASPECT

Jaswinder Kaur¹, Monika Gupta², Parmod Kumar Goyal³

HOW TO CITE THIS ARTICLE:

Jaswinder Kaur, Monika Gupta, Parmod Kumar Goyal. "Age & Sex Determination of Foetus from Ilium: A Medicolegal Aspect". Journal of Evolution of Medical and Dental Sciences 2015; Vol. 4, Issue 28, April 06; Page: 4909-4911, DOI: 10.14260/jemds/2015/714

ABSTRACT: The use of coxal elements for age & sex diagnosis from the skeleton is the primary & most widespread way of bringing us closer to the identity of dead individuals in archeological & certain forensic scenarios. The sample used in this study was obtained from two decomposed bodies which were found in a river near Bathinda. The age & sex was determined from the measurements of ilium with Vernier Caliper & morphology of Greater Sciatic Foramen was studied. Depth & breadth of ilium of 1st case was 25, 25&22,21 and in 2nd case it was 28, 28& 24, 25(mm) on Right & Left side respectively. The morphology (Shape) of greater sciatic foramen was studied & the shape was deep in both the foetuses. From the depth & breadth of ilium the age of 1st case was 32 wks & that of 2nd foetus was between 34-38wks. From the greater sciatic foramen the sex of both the foetuses was male.

KEYWORDS: Ilium, Age, Sex.

INTRODUCTION: The use of coxal elements for age & sex diagnosis from the skeleton is the primary & most widespread way of bringing us closer to the identity of dead individuals in archeological & certain forensic scenarios.¹ The determination of sex in human skeletal remains is crucial to making conclusions about demography & cultural trends of past populations. The bony pelvis exhibits sexually distinct features & is the most accurate indicator of sex for adult specimens. Methods involving the ilium, the largest bone of the pelvis, have demonstrated the most consistent results across multiple tests.²

CASE HISTORY: The foetus bodies were handed over to the department of Anatomy for medical education and research by the police officers after post-mortem examination, being conducted by board of doctors at Civil Hospital Bathinda. On arrival at Anatomy department foetal bodies were in advanced stage of putrefaction.

MATERIAL & METHODS: After cleaning and washing of the bodies with water, skeletal remains got separated easily and then after that recovered bones were dried. The age & sex was determined from the measurements of ilium with Vernier Caliper & morphology of Greater Sciatic Foramen was studied.

Rt & Lt Ilium of case-1 & 2

CASE REPORT

**Measurements of Ilium
(Length & Breadth)**

Shape of Greater Sciatic Notch

RESULTS:

- Length & breadth of ilium of 1st case was 25, 25&22,21 and in 2nd Case it was 28, 28& 24, 25(mm) on Right & Left side respectively.
- The morphology (Shape) of greater sciatic foramen was studied & the shape was deep in both the foetuses.

DISCUSSION: The foetal iliac length as studied by other authors by ultrasound was 25.30 mm at 32 wks of gestational age & 38.36 at 38 wks of gestational age.³ In our present study, the length of ilium was 25 mm in one case & 28 mm in 2nd case that is in relation with past studies. In the morphometry of greater sciatic notch, the bone viewed from dorsal aspect & the shape of greater sciatic notch was studied which is shallow in females & deep in males.¹ In present study, the shape of greater notch was deep in both the cases which indicates that both the cases were male.

CONCLUSION: From the depth & breadth of ilium the age of 1st case was 32 wks & that of 2nd foetus was between 34-38wks. From the greater sciatic foramen the sex of both the foetuses was male.

REFERENCES:

1. Rissech C & Malgosa A: Ilium growth study: applicability in sex & age diagnosis. Forensic science international 2005; 147(2): 165-174.
2. Vlcek D, Roksandic M & Schillaci MA: Greater sciatic notch as a sex indicator in Juveniles. Am J Phys Anth 2008; 137(3): 309-315.
3. Scheuer L & Black S: Developmental juvenile osteology. In length & breadth of ilium. Google books pp 373-375.

CASE REPORT

AUTHORS:

1. Jaswinder Kaur
2. Monika Gupta
3. Parmod Kumar Goyal

PARTICULARS OF CONTRIBUTORS:

1. Professor & HOD, Department of Anatomy, Adesh Institute of Medical Sciences & Research, Bathinda, Punjab.
2. Associate Professor, Department of Anatomy, Adesh Institute of Medical Sciences & Research, Bathinda, Punjab.

FINANCIAL OR OTHER

COMPETING INTERESTS: None

3. Professor & HOD, Department of Forensic Medicine, Adesh Institute of Medical Sciences & Research, Bathinda, Punjab.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Jaswinder Kaur,
Professor & HOD,
Department of Anatomy,
Adesh Institute of Medical Sciences & Research,
Barnala Road, Bathinda, Punjab-151001.
E-mail: jaswindpreet@gmail.com

Date of Submission: 11/03/2015.
Date of Peer Review: 12/03/2015.
Date of Acceptance: 25/03/2015.
Date of Publishing: 06/04/2015.