

TRANSITION ANALYSIS AGE ESTIMATION: ILLUSTRATIONS

Fordisc Version 1.00

Figures are from France Casting pubic symphysis casts and bones from several institutions: France Casting Male and Female Suchey-Brooks Stages (12 each), and Male and Female Instructional casts (FC __); Forensic cases from Mercyhurst College (MC __); Terry Collection, Smithsonian Institution (T __); Bass Donated Collection, University of Tennessee (B __); University of Pretoria (P __); and Norris Farms Collection, Illinois State Museum (NF __).

Each photograph is accompanied by stage name and numerical designation; the part of interest, if relevant; and specimen designation. Some images are reversed to make it easier to compare one specimen to the next. Multiple examples of stages illustrate the variation one might encounter when examining skeletons. At present, illustrations are not available for all stages.

Pubic Symphysis

Symphyseal Relief

1. Sharp billowing
2. Soft, deep billowing
3. Soft, shallow billowing
4. Residual billowing
5. Flat
6. Irregular

Soft, deep billowing 2 (FC F-I-1)



Soft, deep billowing 2 (T 222R, image reversed)



Soft, deep billowing 2 (P 6192, image reversed)



Soft, shallow billowing 3 (FC M-III-1)



Soft, shallow billowing 4 (P 5152, image reversed)



Soft, shallow billowing 4, (T 385, image reversed)



Residual billowing 4, inferior part (MC 7-76)



Residual billowing 4, inferior part (FC M-13)



Flat 5 (FC M-V-1)



Residual billowing 4, inferior part (P 6120, image reversed)



Irregular 6 (FC F-12C)



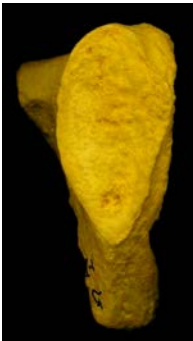
Dorsal Symphyseal Texture

1. Smooth (fine grained)
2. Coarse grained
3. Microporosity
4. Macroporosity

Smooth 1 (FC M-I-1)



Coarse grained 2 (FC M-V-1)



Coarse grained 2 (T 862)



Microporosity 3 (FC F-III-1)



Microporosity 3 (MC 6-69)



Microporosity 3 (MC 7-55, image reversed)



Microporosity 3 (NF 19)



Macroporosity 4 (FC F-12C)



Macroporosity 4 (NF 191)



Superior Protuberance

Characteristics

1. No protuberance
2. Early protuberance
3. Late protuberance
4. Integrated

No protuberance 1 (FC F-I-1)



No protuberance 1 (NF 44)



Early protuberance 2 (FC M-I-2)



Early protuberance 2 (T



Early protuberance 2 (P 5152, image reversed)



Early protuberance 2 (T 255, image reversed)



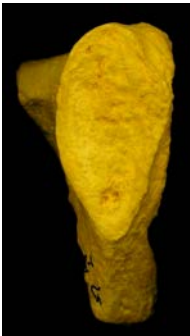
Late protuberance 3 (FC M-III-1)



Late protuberance 3 (T 862)



Integrated 4 (FC M-V-1)



Integrated 4 (MC 7-55)



Ventral Symphyseal Margin

1. Serrated
2. Beveling
3. Rampart formation
4. Rampart completion with anterior sulcus
5. Rampart completion without sulcus
6. Rim
7. Breakdown

Serrated 1 (FC F-I-1)



Beveling 2 (FC M-12)



Beveling 2 (NF 44)



Beveling 2(T 255, image reversed)



Rampart formation 3 (P 6120, image reversed)



Rampart formation 3 (FC M-1B, image reversed)

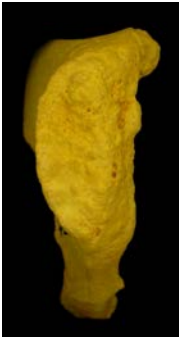


Rampart formation 3 (T 255)

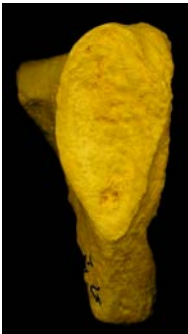


Rampart Completion With or Without Sulcus (Stages 4 and 5) are distinguished by the appearance of the ventral surface, not the symphyseal face. Look for the presence (Stage 4) or absence (Stage 5) of a deep groove on the ventral surface immediately lateral to the anterior margin of the symphyseal face. The groove corresponds to where the Ventral Rampart formed over the previously Beveled surface.

Rampart completion (symphyseal face only shown) (FC F-IV-1)



Rim 6 (FC M-V-1)



Rim 6 (T 862)



Breakdown 7 (FC M-VI-2)



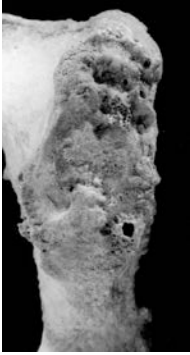
Breakdown 7, breakdown superiorly and rim inferiorly (MC 7-55)



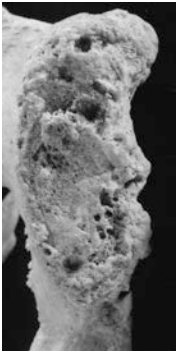
Breakdown 7, breakdown most of margin (MC 7-55, image reversed)



Breakdown 7 (T 500)



Breakdown 7 (T 1115)



Breakdown 7 (NF 191)



Dorsal Symphyseal Margin

1. Serrated
2. Flattening incomplete
3. Flattening complete
4. Rim
5. Breakdown

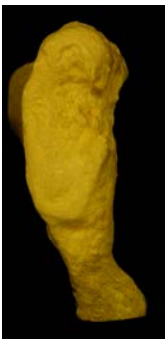
Serrated 1 (FC F-I-1)



Flattening incomplete 2 (FC M-II-1)



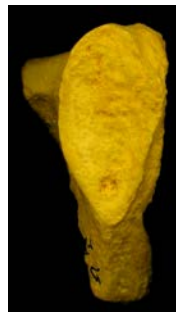
Flattening complete 3(FC M-III-2)



Flattening complete 3(NF 229)



Rim 4 (FC M-V-1)



Rim 4 (NF 19)



Breakdown 5 (FC F-12C)



Breakdown 5 (NF 191)

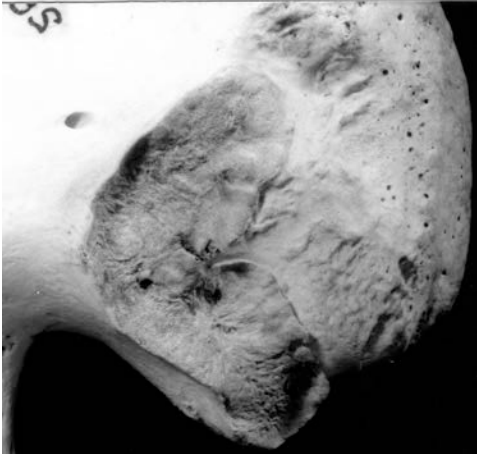


Iliac Auricular Surface

Superior and Inferior demiface topography

1. Undulating
2. Median elevation
3. Flat to irregular

Undulating 1, inferior part (T 269, image reversed)



Undulating 1, inferior part (T 385, image reversed)



Undulating 1, inferior and superior (subtle) parts (P 5897)



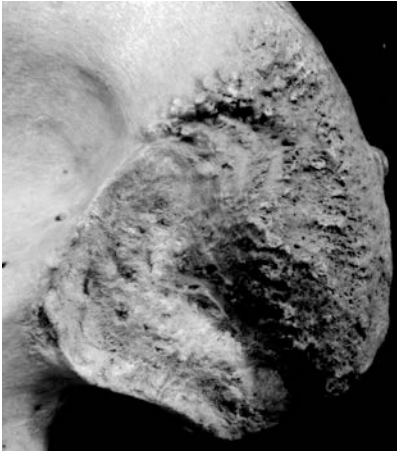
Undulating 1, inferior part (T 255)



Median elevation 2, superior part (MC 6-73)



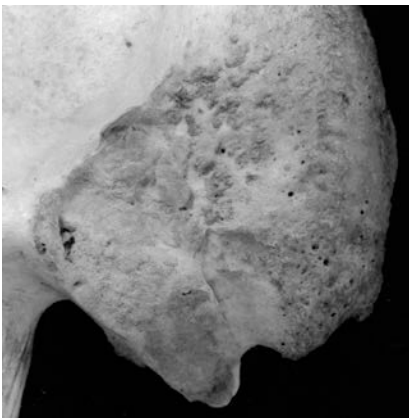
Median elevation 2, inferior part (T 274, image reversed)



Flat 3, inferior part (MC 6-73)



Flat 3, superior and inferior parts (T 500)



Superior, Apical, and Inferior surface characteristics

1. $>2/3$ covered by billows
2. $1/3$ - $2/3$ covered by billows
3. $<1/3$ covered by billows
4. Flat (no billows)
5. Bumps

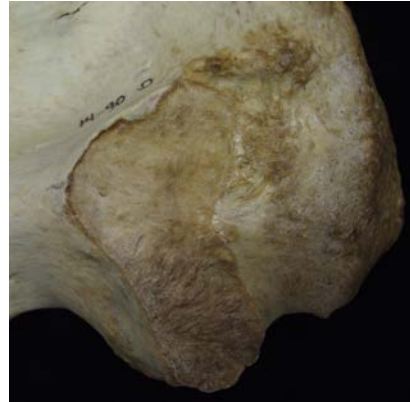
Billows 1-3, inferior part (P 5897)



Billows 1-3, apical part (NF 225, image reversed)



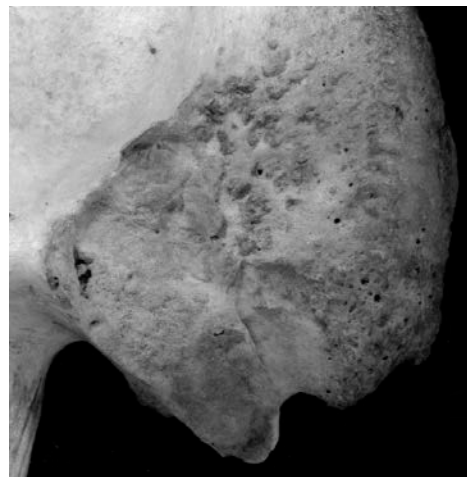
Billows 1-3, inferior part (Bass 14-90)



Billows 1-3, apical and inferior parts (T-1023)



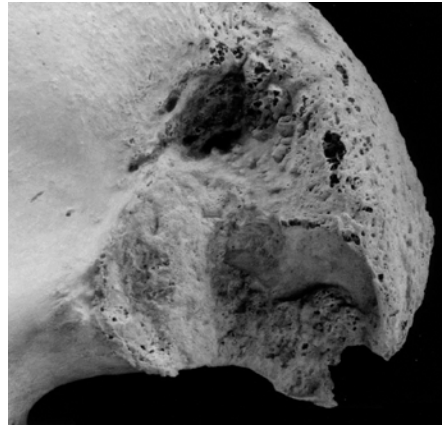
Flat 4, apical and inferior parts (T-500)



Flat 4 (MC 6-73)



Bumps 5 superior part (T-1103R, image reversed)



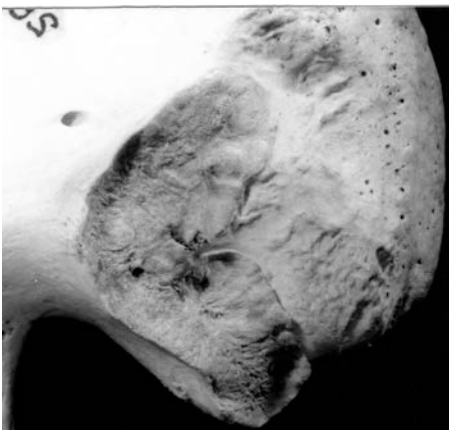
Flat 4, superior part (MC 5-55, image reversed)



Bumps 5 middle part (P 5750, image reversed)



Flat 4, superior part (T 269, image reversed)



Inferior surface texture

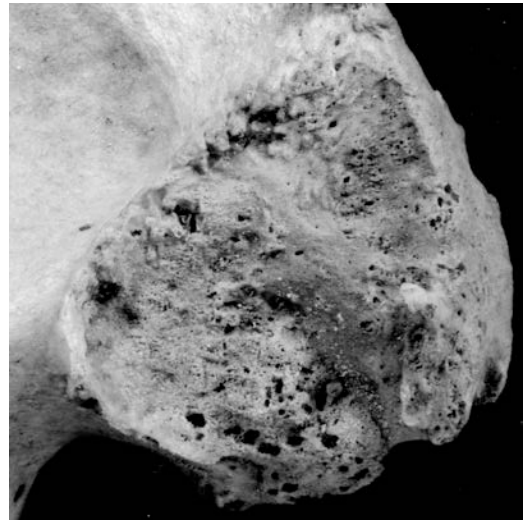
Characteristics

1. Smooth
2. Microporosity
3. Macroporosity

Smooth 1 (MC 6-69)



Macroporosity 3 (T 1394, image reversed)



Microporosity 2 (MC 6-73)



Superior & Inferior posterior iliac exostoses

1. Smooth
2. Rounded exostoses
3. Pointed exostoses
4. Jagged exostoses
5. Touching exostoses
6. Fusion

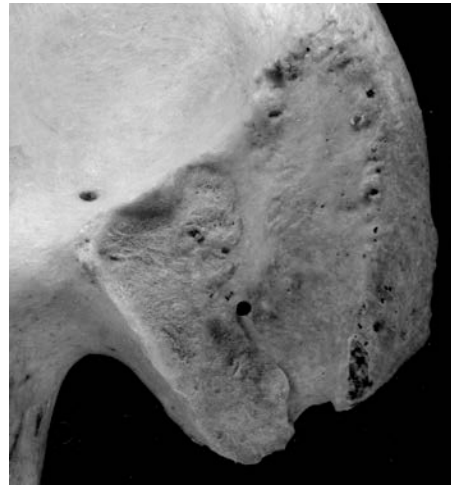
Smooth 1, inferior (T 862)



Smooth 1, inferior exostoses (MC 6-69)



Rounded 2, superior (T 862)



Rounded 2, superior exostoses (T 500)



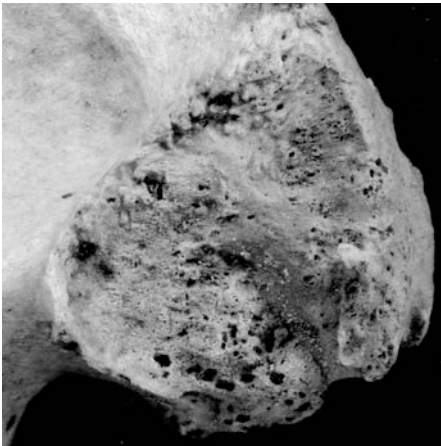
Rounded 2, superior and inferior exostoses (MC 5-55, image reversed)



Rounded 2, superior (MC 7-76)



Pointed 3, superior (T 1394, image reversed)



Pointed 3, inferior, sometimes sharp ones can approximate linear ridges (MC 7-76)



Posterior exostoses

Characteristics

1. Smooth (no exostoses)
2. Rounded exostoses
3. Pointed exostoses

Smooth 1 (T 862)



Smooth 1 (MC 6-69)



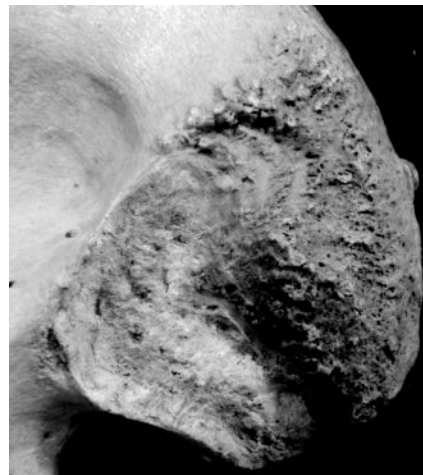
Smooth 1, while exostoses are present, significant areas of smooth bone remain (MC 5-55, image reversed)



Smooth 1, while exostoses are present, significant areas of smooth bone remain (MC 7-76)



Rounded 2 (T 274, image reversed)



Sacroiliac Joint, Not Scorable

Superior part of sacroiliac joint surface cannot be scored because of significant abnormal pitting (NF 229, image reversed). Sometimes defects in the surface take the form of grooves that extend across the joint in a roughly transverse direction. Multiple closely spaced grooves often prevent the scoring of surface characteristics.



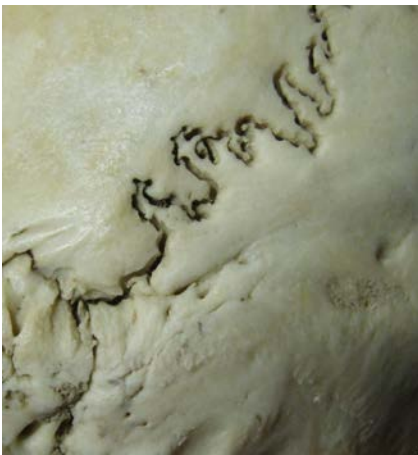
Cranial Sutures

Coronal Pterica (left), Sagittal Obelica, Lambdoidal Asterica (left), Zygomaticomaxillary (left), Interpalatine (median palatine, posterior portion)

Characteristics

1. Open
2. Juxtaposed
3. Partially obliterated
4. Punctuated
5. Obliterated

Open, Lambdoidal Asterica (MC 7-76)



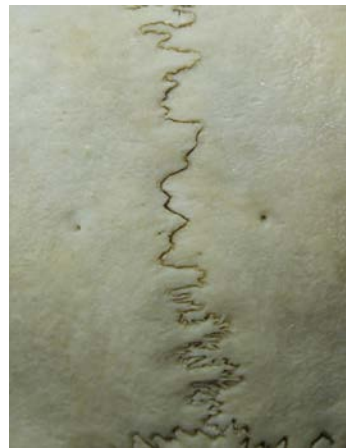
Open, Coronal Pterica (MC 6-69)



Juxtaposed, Zygomaticomaxillary (MC 6-69)



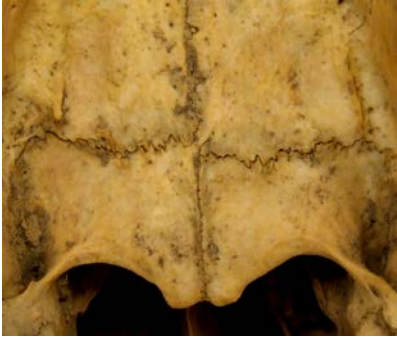
Juxtaposed (MC 7-76)



Open & Juxtaposed, Interpalatine, combined for Interpalatine only (MC 6-69)



Open & Juxtaposed, Interpalatine, combined for Interpalatine only (NF 229)



Partly obliterated, Coronal Pterica (MC 6-69)



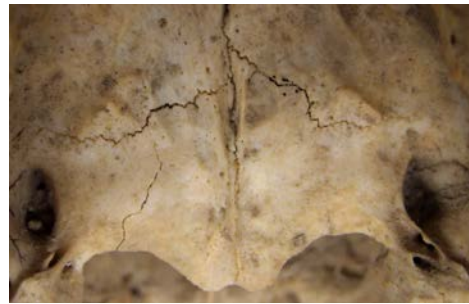
Partly obliterated, Coronal Pterica (NF 225)



Partly obliterated, Zygomaticomaxillary (MC 7-55)



Partly obliterated, Interpalatine (NF 225)



Punctuated, Sagittal Obelica (only Obelica, not segments on either side) (MC 7-55)



Obliterated, Coronal Pterica (MC 7-55)

