

- 1 Recommended standardized anatomic terminology of the posterior female pelvis and vulva
2 based on a structured medical literature review.
3
- 4 Audra Jolyn HILL, MD – University of Utah, Salt Lake City, UT
- 5 Sunil BALGOBIN, MD – University of Texas Southwestern Medical Center, Dallas, TX
- 6 Kavita MISHRA, MD – Stanford University, Palo Alto, CA
- 7 Peter C. JEPPSON, MD – University of New Mexico, Albuquerque, NM
- 8 Thomas WHEELER, II MD, MSPH University of South Carolina School of Medicine,
9 Greenville, SC
- 10 Donna MAZLOOMDOOST, MD – Mid-Atlantic Urogynecology and Pelvic Surgery, Annadale,
11 VA.
- 12 Mallika ANAND, MD, MS – Boston University School of Medicine, Boston, MA
- 13 Cara NINIVAGGIO – University of New Mexico, Albuquerque, NM
- 14 Jennifer HAMNER – Indiana University, Indianapolis, IN
- 15 Katarzyna BOCHENSKA, MD – Illinois Urogynecology, Park Ridge, IL
- 16 Saifuddin T. MAMA, MD, MPH – Cooper Medical School of Rowan University, Camden, NJ
- 17 Ethan M. BALK, MD, MPH – Center for Evidence Synthesis in Health, Brown University
18 School of Public Health, Providence, Rhode Island

This is the author's manuscript of the article published in final edited form as:

Hill, A. J., Balgobin, S., Mishra, K., Jeppson, P. C., WHEELER II, T., Mazloomdoost, D., ... & DELANCEY, J. (2021). Recommended standardized anatomic terminology of the posterior female pelvis and vulva based on a structured medical literature review. *American Journal of Obstetrics and Gynecology*. <https://doi.org/10.1016/j.ajog.2021.02.033>

19 Marlene M. CORTON, MD, MSCS – University of Texas Southwestern Medical Center, Dallas,

20 TX

21 John DELANCEY, MD – University of Michigan Department of Obstetrics and Gynecology,

22 Ann Arbor, Michigan.

23 For the Society of Gynecologic Surgeons Pelvic Anatomy Group.

24 The authors report no conflict of interest.

25 Presented at Society of Gynecologic Surgeons 45th Annual Scientific Meeting, Tucson, AZ,

26 March 31 – April 3, 2019.

27 Corresponding Author

28 Audra Jolyn Hill, MD

29 University of Utah, Department of Obstetrics and Gynecology,

30 Division of Female Pelvic Medicine and Reconstructive Surgery,

31 30 N 1900E, 2B200, Salt Lake City, UT, 84132

32 Tel: 801-213-2995 Fax:801-587-8431 E-mail: jolyn.hill@hsc.utah.edu

33 Word count: Abstract 268/Manuscript 2951

34

35 Condensation: A review of published literature as it relates to the standardized anatomic
36 terminology of the posterior female pelvic anatomy and vulva.

37 Short Title: Standardized terminology of the posterior female pelvis and vulva.

38 AJOG at a Glance:

39 A) Why was the study conducted? To reconcile anatomical terms in widespread clinical
40 use for the vulva, posterior female pelvic anatomy, including the posterior vagina,
41 with internationally accepted standardized anatomical terminology to facilitate clear
42 communication among health care providers.

43 B) What are the key findings? We identified anatomic structures in the posterior female
44 pelvis and vulva and provided a list of preferred terms along with proposal of new
45 terms.

46 C) What does this study add to what is already known? This study provides a
47 standardized anatomical terminology guide for unambiguous communication between
48 health care providers as it relates to the posterior female pelvis and vulva.

49 Keywords: female pelvic anatomy, gynecology, nomenclature, posterior pelvis, posterior vagina,
50 terminology, vulva

51

52 ABSTRACT

53 BACKGROUND: Anatomic terminology in both written and verbal forms has been shown to be
54 inaccurate and imprecise.

55

56 OBJECTIVES: We aimed to (1) review published anatomic terminology as it relates to the
57 posterior female pelvis, posterior vagina, and vulva; (2) compare these terms to *Terminologia*
58 *Anatomica*, the internationally standardized terminology, and (3) compile standardized anatomic
59 terms for improved communication and understanding.

60

61 STUDY DESIGN: MEDLINE was searched from inception until April 6, 2018 using 40 search
62 terms relevant to posterior female pelvic and vulvar anatomy. Eleven investigators reviewed
63 identified abstracts and selected those reporting on posterior female pelvic and vulvar anatomy
64 for full-text review. Eleven textbook chapters were also included. Definitions of all pertinent
65 anatomic terms were extracted for review.

66 RESULTS: In all, 486 anatomic terms were identified describing the vulva and posterior female
67 pelvic anatomy, including the posterior vagina. *Terminologia Anatomica* has previously accepted
68 186 of these terms. Based on this literature review, we propose the adoption of 11 new
69 standardized anatomic terms including: 6 regional terms (anal sphincter complex, anorectum,
70 genital-crural fold, interlabial sulcus, posterior vaginal compartment, and sacrospinous-
71 coccygeus complex), 4 structural terms (greater vestibular duct, anal cushions, nerve to the
72 levator ani, and labial fat pad), and 1 anatomic space (deep postanal space). In addition, the

73 current accepted term rectovaginal fascia/septum was identified as controversial and requires
74 further research and definition prior to continued acceptance or rejection in medical
75 communication.

76 **CONCLUSION:** This study highlights variability in the anatomic nomenclature used in
77 describing the posterior female pelvis and vulva. We recommend the use of standardized
78 terminology to improve communication and education across medical and anatomic disciplines.

79

80 Introduction:

81 Anatomic knowledge and the understanding of pathology, as it impacts specific vital structures
82 in the human body, is crucial to the practice of medicine. Imprecision in the use of anatomic
83 terms, particularly in surgical procedures, can lead to confusion about key steps and ambiguity
84 about surgical procedures, ultimately affecting patient care and safety.¹⁻³ Clear, standardized
85 definitions of anatomic terms are necessary for the transfer of knowledge in medicine, health
86 education, and research.

87 In an effort to consolidate and improve communication about anatomy, the *Basle*
88 *Terminologia Anatomica* was published in 1895 and significantly reduced the number of
89 anatomic terms from 50,000 to 5,000.⁴ In 1998, the Federative Committee on Anatomical
90 Terminology, with broad representation from various anatomical organizations, published
91 *Terminologia Anatomica* (TA) designed to be the international reference standard of
92 anatomic terms.^{4,5} *Terminologia Anatomica*, however, has several limitations in that it
93 lacks definitions for certain structures, does not adequately describe landmarks and planes
94 often used in surgical practice, and was written by a small number of experts with little
95 transparency about the process of selecting terms.^{6,7} Recently updated in 2011,
96 *Terminologia Anatomica* also lacks information from imaging modalities and laboratory
97 studies that have furthered the understanding of anatomy.

98 Currently, the body of knowledge of female pelvic anatomy is described from a variety of
99 perspectives, including anatomists, radiologists, and surgeons.

100 The Society of Gynecologic Surgeons (SGS) Pelvic Anatomy Group (PAG) was formed in
101 2016 to create a standardized list of terms for female pelvic anatomy and to address the
102 limitations in current references such as *Terminologia Anatomica*. The standardization of

103 anatomic terms can help unify the medical literature and improve communication among
104 researchers and clinicians. Recently, this group published the results of two reviews of
105 anatomical terms and recommended standardized terminology for the anterior
106 compartment⁸ and apical segment⁹ of the female pelvis. The primary aim of the current
107 study was to review the literature, clarify ambiguous terms, reconcile multiple terms used
108 for singular structures, and provide a list of new, clearly defined terms specific to the
109 vulva and posterior female pelvis, including the posterior vagina.

110

111 **Materials and Methods:**

112 The SGS Pelvic Anatomy Group consists of gynecological surgeons with extensive clinical,
113 anatomical, surgical and imaging expertise, as well as physicians with vast experience in
114 systematic review methodology. Based on our prior work on the anterior female pelvis⁸ and
115 apical structures in the female pelvis,⁹ an extensive literature search was undertaken to identify
116 relevant terms to the posterior female pelvis, posterior vagina, and vulva.

117 The posterior pelvis was defined as the area inferior to the superior aspect of the sacrum,
118 including and dorsal to the posterior vaginal wall, medial to the wing of the ilium, and extending
119 inferiorly to the perineum. The posterior margin extended to, but did not include the dermal
120 layers of the skin. The vulva was defined as the area from the mons pubis to the anus and medial
121 to the genital-crural folds, not extending proximally beyond the pubic bone. We excluded
122 adjacent pelvic viscera (i.e. rectum and anal anatomy superior to the pectinate line).

123 For review of the literature, all study types were accepted including primary clinical studies,
124 narrative review articles, case reports, and studies that described surgical, cadaveric, and
125 radiological anatomy. Radiologic studies utilized computed tomography, magnetic resonance,

126 sonography and fluoroscopy. Additionally, 11 textbook chapters were selected for review.¹⁰⁻²⁰
127 The book chapters were selected to include relevant anatomical, surgical, and imaging terms
128 from various medical disciplines and anatomists to ensure a broad representation of anatomic
129 terminology. All terms were then compared to terms in *Terminologia Anatomica*.⁵ As our focus
130 was on normal, adult female anatomy, literature and terms related to the following were
131 excluded: 1) male anatomy, 2) subjects less than 18 years of age, 3) obstetric/postpartum related
132 anatomy 4) histology, 5) cytology, 6) congenital anomalies, and 7) oncologic pathology. We also
133 excluded non-English manuscripts, meeting abstracts, video abstracts, and abstracts without full
134 text manuscripts.

135 MEDLINE was searched from its inception through April 6, 2018 using the following search
136 terms, including MeSH terms when possible: ala, anal sphincter, Bartholin's gland,
137 bulbospongiosus, central tendon, clitoris, coccygeus, coccyx, Denonvillier's, dorsal nerve,
138 female genitalia, gluteal artery/vein, gluteus muscle, hymen, iliac crest, iliac spine, iliacus,
139 introitus, ischiocavernosus, perineal muscle, perineal body, perineal membrane, perineal nerve,
140 perineal artery/vein, piriformis, posterior vaginal wall, puborectalis, pudendal canal,
141 sacrospinous ligament, sacrotuberous ligament, sacrum, sciatic nerve, Skene's duct/gland,
142 urogenital diaphragm, vestibule(ar), and vulva. As this was a review of previously published
143 data, institutional review board approval was not required.

144 Abstracts were screened by 11 reviewers using a computer software program, Abstrackr
145 (<http://abstrackr.cebm.brown.edu>).²¹ Based on the patterns of accepts/rejects, the software uses
146 machine learning to identify most-likely relevant citations. Screening was completed in two
147 phases due to the large number of accepted abstracts. Book chapters were reviewed individually
148 by reviewers.

149 Phase 1 consisted of “mapping” in which abstracts were screened and common anatomic terms
150 were identified. Each of the accepted abstracts was grouped under a common anatomic term,
151 randomly selected, and assigned to individual group members for review. An iterative approach
152 was undertaken in which groups of 10 to 15 articles were reviewed concurrently. We identified
153 14 common terms: anal sphincter, clitoris, labia/um, perineum, pudendal, puborectalis,
154 rectovaginal, sacrospinous, vulva, piriformis, Bartholin’s, sciatic, inferior gluteal artery,
155 introitus, and “other”. Once a common term was deemed “saturated” (i.e., appearing in 12
156 accepted manuscripts) it was then excluded from further screening and extraction. To ensure
157 adequate representation of the rarer terms, abstracts that were not initially assigned to a common
158 anatomic term were selected for review at twice the rate of the common terms. This process was
159 repeated until approximately 200 articles had been selected for full extraction. Based on our
160 prior work^{8,9} and group consensus, inclusion of 200 articles appears to offer a representative
161 sample of the published literature while allowing for feasibility of the study.

162 Phase 2 included full extraction of each article and book chapter distributed among the 11
163 reviewers. The following variables were collected in a standardized extraction form, including:
164 reported anatomic term(s), author’s proposed definitions if available, publication year, country of
165 origin, and study type. Anatomic terms were then matched to terms referenced in *Terminologia*
166 *Anatomica*. Terms that did not have a corresponding term, were recorded for further group
167 review and discussion. Based on group consensus, these terms were identified and accepted as
168 “proposed” new terms, rejected terms, or controversial terms that require further information.

169 Anatomic terms that were identified as histologic entities (e.g., fascia), were captured for
170 planned future reviews. Lastly, anatomic terms that were previously discussed in the anterior

171 compartment and apical segment projects, and not relevant to the posterior pelvis, were
172 excluded.^{8,9} Two pelvic anatomy experts (MMC, JD) were consulted throughout the process.
173 The preliminary findings were presented at the SGS 45th Annual Scientific Meeting in April
174 2019 in Tucson, AZ. Our complete results and drafted article were then submitted to the SGS
175 Board of Directors for review and approval. Additional reviewers included both colorectal and
176 urological surgeons. Lastly, the project was subsequently distributed to the SGS membership
177 community, which includes general and subspecialty gynecologists, for review.

178

179 Results:

180 The literature search identified 22,872 abstracts of which 19,938 were excluded via an initial
181 round of abstract review. After phase 1 review and ‘saturation’ of common anatomic terms, full
182 extraction was performed on 222 full-text articles and 11 book chapters. We rejected 15 full-text
183 articles due to inability to isolate female specific anatomic terms, focus malignant pathology,
184 and/or absence of predefined anatomic terms relevant to this review. A total of 486 separate
185 terms were identified and after group consensus, 222 terms were rejected due to being
186 nondescriptive or outside of the scope of the posterior pelvis or vulva (Figure 1). The remaining
187 264 terms were then categorized into previously accepted terms in *Terminologia Anatomica*
188 (Table 1) and proposed new terms (Table 2). Table 1 lists previously accepted terms in
189 *Terminologia Anatomica* along with the nonpreferred synonyms noted in this review. Table 2
190 summarizes the proposed new terms and definitions that were developed based on published
191 literature and group consensus. Anatomic illustrations are included to further highlight posterior
192 pelvic and vulvar anatomy along with incorporation of key proposed terms (Figures 2,3).

193

194 Proposed New Terms

195 Regional Terms: These generalized terms describe an anatomical region rather than a definitive
196 anatomical structure.

- 197 1) Anal sphincter complex: appeared in 4 citations²²⁻²⁵ from 3 countries (Australia,
198 Austria, United States) from 2004 to 2013. A synonym noted was “anal sphincter
199 muscles.” The anal sphincter complex is a grouping term that can be used when
200 describing all portions of the external and internal anal sphincter muscles.
- 201 2) Anorectum: was used in 6 citations²⁶⁻³¹ from 1993 to 2013 from 4 countries (Austria,
202 Australia, Norway, United States). As this term was not specifically defined in the
203 selected articles, we propose this term as the area where the rectum fuses with the
204 anal canal during embryological development. This was primarily described in
205 radiographic imaging studies and in gross anatomy reviews.
- 206 3) Genital-crural fold: appeared in 1 citation³² from 1994 from the United States. This
207 term describes the groove between the superior medial thigh and the lateral aspect of
208 the labium majus. A non-preferred synonym was “groin crease.”
- 209 4) Interlabial sulcus: was used in 1 citation³³ from 2015 from the United States. A non-
210 preferred synonym noted was “labial sulcus.” This term describes the groove where
211 the medial aspect of the labium majus and the lateral aspect of the labium minus
212 intersect.
- 213 5) Posterior vaginal compartment: was used in 6 citations^{22,31,34-37} from 2001 to 2018
214 from 5 countries (Australia, Canada, Italy, Germany, United States). This region is

215 defined as that includes the posterior vaginal wall from the epithelium of the perineal
216 body distally to the recto-uterine peritoneal fold proximally. It extends dorsally to the
217 anterior rectal and anal canal walls and laterally to where the lateral walls of the
218 posterior vagina join the connective tissue that attach to the bony pelvis.

219 6) Sacrospinous-coccygeus complex: appeared in 3 citations³⁸⁻⁴⁰ from 2007 - 2016 from
220 1 country (United States). The sacrospinous-coccygeus complex includes both the
221 sacrospinous ligament and overlying coccygeus muscle. These structures have the
222 same attachment points and represent the apical fixation point during sacrospinous
223 ligament fixation procedures.

224

225 Structural Terms:

226 1) Greater vestibular duct: appeared in 2 citations^{41,42} from 1950 to 2012 from 1
227 country (United States). The non-preferred synonym noted in the literature was
228 “Bartholin’s gland duct”. This term is used to describe a duct that supplies the greater
229 vestibular gland.

230 2) Anal cushions: was used in 2 citations^{29,43} from 2004 to 2006 from 2 countries
231 (United Kingdom, United States). The non-preferred synonym identified in the
232 literature was “endovascular cushions.” This term describes the mucosal vascular
233 prominences formed by clusters of veins surrounding the anal canal.

234 3) Nerve to levator ani: appeared in 6 citations^{10,38,44-47} from 2006 to 2018 from 2
235 countries (Netherlands, United States). This nerve is described as originating from the
236 third through fifth sacral nerve roots (S3-S5) and supplying the levator ani muscles
237 from their superior or pelvic surface.

238 4) Labial fat pad: used in 1 citation⁴⁸ in 2013 from China. The non-preferred synonym
239 was “bulbocavernosus fat pad.” This term is used to describe the fat that underlies
240 the labium majus and is used during creation of the Martius labial interposition flap
241 for pelvic surgery.

242 Anatomic spaces:

243 1) Deep postanal space: used in 1 citation⁴² from 2012 from the United States. This
244 space is described as the region between the levator ani and the anococcygeal body,
245 which includes the pubococcygeal tendon, iliococcygeal raphe and the attachment of
246 the superficial external anal sphincter. The anterior border is the deep part of the
247 external anal sphincter, superior border is the inferior surface of the levator ani
248 muscles, and the inferior border is the superficial part of the anal sphincter as it
249 inserts to the coccyx via the anococcygeal body. This space can be relevant in
250 location and treatment of anal fistulas and/or abscesses.

251 Controversial term:

252 1) Rectovaginal fascia; rectovaginal septum: was described in 33 citations¹¹⁻
253 ^{13,15,16,22,24,26,28,31,34,35,37,49-65} from 11 countries (Australia, Austria, Brazil, Canada,
254 Germany, Italy, Japan, Poland, Switzerland, United Kingdom, United States)
255 from 1996 to 2018. Nonpreferred synonyms included Denonvillier’s
256 fascia,^{15,19,26,53,62,66,67} rectogenital fascia,²³ rectogenital septum,²³ and prerectal
257 fascia.³⁶ *Terminologia Anatomica* recognizes this as an anatomic structure and it
258 has been widely used in anatomic literature. However, more recent investigations
259 have failed to identify a distinct dense fibroconnective tissue “fascial” layer
260 between the anterior rectal wall and posterior vaginal wall.³⁹ Further histologic

261 investigation is needed, as there is insufficient evidence to support or refute
262 continued use of this term.

263

264 Comment:

265 Principal Findings: The purpose of this review was to identify, describe, and standardize
266 anatomical terms in the literature related to the posterior female pelvis and vulva. Similar to our
267 group's previous work, we identified the lack of standardized anatomic terminology and notable
268 inconsistencies in the medical literature.

269 Results: After review, we propose six new regional terms (anal sphincter complex, anorectum,
270 genito-crural fold, interlabial sulcus, posterior vaginal compartment, and sacrospinous-
271 coccygeus complex), four anatomic terms (greater vestibular duct, anal cushions, nerve to
272 levator ani, and labial fat pad), one anatomic space (deep postanal space), and one controversial
273 term (rectovaginal fascia; rectovaginal septum).

274 Clinical Implications: Throughout this review, as with our prior reviews, the use of eponyms was
275 notable. Eponyms, or terms named after their discoverers, are prevalent throughout medical
276 communication and education. In obstetrics and gynecology, eponyms exist in many domains,
277 including anatomic structures, surgical instruments, surgical procedures, incisions, diseases
278 states, scoring systems, physical examination findings, and diagnostic tests.⁶⁸ For example, two
279 particular terms "Bartholin's gland" and "Fallopian tube," are in such common use and have
280 become so entrenched in the anatomical lexicon that they are often spelled without
281 capitalization.^{9,68} Although such terms may add historical significance and a more human side to
282 the technical aspects of medicine, they are often a source of confusion. For example, the term
283 "Bartholin's gland" appears in the *Terminologia Anatomica* index of eponymous terms, a listing

284 designed to assist readers in identification of appropriate non-eponymous terms.⁵ The
285 corresponding *Terminologia Anatomica* term for this eponym is greater vestibular gland.
286 “Bartholin’s duct” also appears in this index, but is not the duct of the greater vestibular gland as
287 would be expected by a women’s health practitioner, but rather the major sublingual salivary
288 gland duct, a term for which Caspar Bartholin is also credited.⁶⁹ Thus, our proposal for “greater
289 vestibular duct” was not arbitrary, but designed to circumvent such confusion and promote
290 consistency in the use of these terms. Similar confusion exists surrounding the Fallopian
291 (uterine) tube nomenclature, wherein Gabriele Fallopio has been credited with naming other
292 parts of the human body – “Fallopian” (facial) canal, “Fallopian” (inguinal) ligament,
293 “Fallopian” muscle (pyramidalis), and “Fallopian” (ieocecal) valve.⁷⁰ Thus, while we
294 acknowledge the challenges in eliminating such prominent terms from our vocabulary, we
295 recommend avoiding eponyms and advise adherence to unique standardized terms in medical
296 communications.

297 In review of vulvar anatomy, various terms, groupings, and non-preferred synonyms were
298 encountered. Knowledge of vulvar anatomy is essential for surgical procedures and has also
299 crossed into the medico-legal and socio-cultural domains, which highlights the need for
300 terminological standards. With the growing popularity of female genital cosmetic surgery,
301 including reduction of the clitoral prepuce, alteration of the labial minora/majora, hymenal
302 reconstruction, or amplification of the “G-spot”,⁷¹ preferred and accepted terminology is
303 paramount.

304 Research Implications: Though rectovaginal fascia/septum is an accepted *Terminologia*
305 *Anatomica* term, it has been classified as a controversial term in this focused evaluation of the
306 posterior compartment. Rectovaginal fascia/septum or various synonyms were identified in 33 of

307 the selected publications for review and the term commonly utilized in both anatomical and
308 surgical arenas. However, additional studies have been inconclusive as to whether a rectovaginal
309 fascia/septum is a distinct entity.^{39,54,72-75} Redefining a standard *Terminologia Anatomica* term
310 represents a departure from previous work from this group,^{8,9} but epitomizes and highlights our
311 purpose to compile, clarify, and update, if indicated, standard anatomic terms for the female
312 pelvis. In *Terminologia Anatomica*, the same unique identifying number is used for
313 “rectovaginal fascia; rectovaginal septum”; and “rectovesical septum.” However, six common
314 anatomic and surgical textbooks in this study describe a fascial condensation between the vagina
315 and the rectum that is surgically important for posterior vaginal repair, vaginal reconstruction,
316 and rectal mobilization during colorectal procedures. Given the potential of this structure, further
317 research is necessary to resolve the discrepancy between surgical and histologic findings and to
318 inform future terminology recommendations.

319 Strengths and Limitations: Strengths of this study include a broad comprehensive review of
320 current literature including surgical manuscripts, cadaveric descriptions, radiographic imaging
321 modalities, gross anatomy textbooks, and pathological studies. Although not technically a
322 systematic review, as it was not feasible to extract terms from 22,000+ manuscripts, we clarified
323 anatomic terminology of the posterior female pelvis and vulva using standardized extraction. All
324 terms were compared to the standard referent *Terminologia Anatomica* and when applicable, we
325 utilized group consensus.

326 Limitations of our work include restricting analysis to only those terms published in the English
327 language. Additionally, it is possible that by excluding non-English studies, meeting abstracts,
328 rare anatomy, and obstetrical/postpartum anatomy, we may have overlooked less commonly
329 used terminology or unique anatomic descriptions. Ultimately, the focus of this review was on

330 normal anatomy for the posterior female pelvis and vulva, therefore, we excluded abnormal
331 pathology such as malignancy and congenital anomalies. Finally, the majority of group members
332 are gynecological specialists. Therefore, we sought the input and review from other pelvic
333 specialists, such as colorectal surgeons and urologists.

334 Conclusion: Through expert review and group consensus, we present a list of recommended
335 terms for the posterior female pelvis and vulva and propose new anatomic terms to be considered
336 for adoption. As with our previous work, we recommend use of the English or Latin accepted
337 term and minimizing the use of nonpreferred synonyms and/or eponyms. Use of standardized
338 terminology in both written and verbal communications, will lead to less confusion and
339 improved understanding between clinicians, surgeons, anatomists, and students.

340

341 References

- 342 1. Greathouse DG, Halle JS, Dalley AF, 2nd. Terminologia Anatomica: revised
343 anatomical terminology. *J Orthop Sports Phys Ther.* 2004;34(7):363-367.
- 344 2. Hirsch BE. Does the Terminologia Anatomica really matter? *Clin Anat.*
345 2011;24(4):503-504.
- 346 3. American Association of Clinical Anatomists EAC. The clinical anatomy of
347 several invasive procedures. *Clin Anat.* 1999;12(1):43-54.
- 348 4. Gobebe OP, Jansma D, DeRuiter MC. AnatomicalTerms.info: heading for an online
349 solution to the anatomical synonym problem hurdles in data-reuse from the
350 Terminologia Anatomica and the foundational model of anatomy and potentials for
351 future development. *Clin Anat.* 2011;24(7):817-830.
- 352 5. Terminologies TFIPoA. *Terminologia Anatomica: International Anatomical*
353 *Anatomy.* New York (NY): Georg Thieme Verlag; 2011.
- 354 6. Tunn R, DeLancey JO, Quint EE. Visibility of pelvic organ support system
355 structures in magnetic resonance images without an endovaginal coil. *Am J Obstet*
356 *Gynecol.* 2001;184(6):1156-1163.
- 357 7. Butler-Manuel SA, BATTERY LD, A'Hern RP, Polak JM, Barton DP. Pelvic nerve
358 plexus trauma at radical hysterectomy and simple hysterectomy: the nerve content
359 of the uterine supporting ligaments. *Cancer.* 2000;89(4):834-841.
- 360 8. Jeppson PC, Balgobin S, Washington BB, et al. Recommended standardized
361 terminology of the anterior female pelvis based on a structured medical literature
362 review. *Am J Obstet Gynecol.* 2018;219(1):26-39.

- 363 9. Balgobin S, Jeppson PC, Wheeler T, 2nd, et al. Standardized terminology of apical
364 structures in the female pelvis based on a structured medical literature review. *Am J*
365 *Obstet Gynecol.* 2020;222(3):204-218.
- 366 10. Walters MD KM. Anatomy fo the Lower Urinary Tract, Pelvic Floor, and Rectum.
367 In: *Urogynecology and Reconstructive Pelvic Surgery.* 4th ed. Philadelphia (PA):
368 Elsevier; 2015:19-31.
- 369 11. Nichols DH RC. Pelvic Anatomy of the Living. In: *Vaginal Surgery.* Baltimore
370 (MD): Williams and Wilkins; 1996:1-42.
- 371 12. Hansen JT NF. Pelvis and Perineum. In: *Netters Clinical Anatomy.* Philadelphia
372 (PA): Saunders/Elsevier; 2014:217-269.
- 373 13. Baggish MS KM. Advanced Pelvic Anatomy. In: *Atlas of Pelvic Anatomy and*
374 *Gynecologic Surgery.* St. Louis (MO): Elsevier/Saunders; 2016:59-73.
- 375 14. MS B. Basic Pelvic Anatomy. In: *Atlas of Pelvic Anatomy and Gynecologic*
376 *Surgery.* St. Louis (MO): Esevier/Saunders; 2016:5-58.
- 377 15. G R. Pelvic Anatomy for the Gynecologic Surgeon. In: *Gynecologic, obstetric and*
378 *related surgery.* St. Louis (MO): Mosby; 2000:27-68.
- 379 16. Reiffenstuhl GR PW. Anatomical description. In: *Atlas of vaginal surgery:*
380 *surgical anatomy and technique.* Philadelphia (PA): Saunders; 1975:1-78.
- 381 17. W B. CT, MRI, and Radiographic imaging. In: *Fundamentals of diagnostic*
382 *radiology.* Philadelphia (PA): Lippincott Williams and Wilkins; 2012:838-856.
- 383 18. Drake RL VW, Mitchell AWM, Gray H. Pelvis and Perineum. In: *Gray's Anatomy*
384 *for students.* Philadelphia (PA): Livingstone/Elsevier; 2015:421-532.

- 385 19. Araghizadeh F AA. Anatomy and Physiology. In: *Colon and Rectal Surgery*.
386 Philadelphia (PA): Elsevier; 2013:3-16.
- 387 20. D S. Gynecologic Imaging. In: *A Textbook of Radiology and Imaging*. Edinburgh,
388 Scotland: Churchill Livingstone; 2002:1069-1105.
- 389 21. Wallace BC, Trikalinos TA, Lau J, Brodley C, Schmid CH. Semi-automated
390 screening of biomedical citations for systematic reviews. *BMC Bioinformatics*.
391 2010;11:55.
- 392 22. Shobeiri SA, White D, Quiroz LH, Nihira MA. Anterior and posterior
393 compartment 3D endovaginal ultrasound anatomy based on direct histologic
394 comparison. *Int Urogynecol J*. 2012;23(8):1047-1053.
- 395 23. Aigner F, Zbar AP, Ludwikowski B, Kreczy A, Kovacs P, Fritsch H. The
396 rectogenital septum: morphology, function, and clinical relevance. *Dis Colon*
397 *Rectum*. 2004;47(2):131-140.
- 398 24. Karram M, Maher C. Surgery for posterior vaginal wall prolapse. *Int Urogynecol J*.
399 2013;24(11):1835-1841.
- 400 25. Morgan DM, DeLancey JO, Guire KE, Fenner DE. Symptoms of anal incontinence
401 and difficult defecation among women with prolapse and a matched control cohort.
402 *Am J Obstet Gynecol*. 2007;197(5):509.e501-506.
- 403 26. Woodman PJ, Graney DO. Anatomy and physiology of the female perineal body
404 with relevance to obstetrical injury and repair. *Clin Anat*. 2002;15(5):321-334.
- 405 27. Volloyhaug I, Wong V, Shek KL, Dietz HP. Does levator avulsion cause distension
406 of the genital hiatus and perineal body? *Int Urogynecol J*. 2013;24(7):1161-1165.

- 407 28. Abendstein B, Petros PE, Richardson PA, Goeschen K, Dodero D. The surgical
408 anatomy of rectocele and anterior rectal wall intussusception. *Int Urogynecol J*
409 *Pelvic Floor Dysfunct.* 2008;19(5):705-710.
- 410 29. Rao SS. Pathophysiology of adult fecal incontinence. *Gastroenterology.*
411 2004;126(1 Suppl 1):S14-22.
- 412 30. Farouk R, Bartolo DC. The clinical contribution of integrated laboratory and
413 ambulatory anorectal physiology assessment in faecal incontinence. *Int J*
414 *Colorectal Dis.* 1993;8(2):60-65.
- 415 31. Shek KL, Dietz HP. Pelvic floor ultrasonography: an update. *Minerva Ginecol.*
416 2013;65(1):1-20.
- 417 32. Spear SL, Pellegrino CJ, Attinger CE, Potkul RK. Vulvar reconstruction using a
418 mons pubis flap. *Annals of plastic surgery.* 1994;32(6):602-605.
- 419 33. Placik OJ, Arkins JP. A Prospective Evaluation of Female External Genitalia
420 Sensitivity to Pressure following Labia Minora Reduction and Clitoral Hood
421 Reduction. *Plast Reconstr Surg.* 2015;136(4):442e-452e.
- 422 34. Campagna G, Panico G, Morciano A, et al. Vaginal mesh repair SYSTEMS for
423 pelvic organ prolapse: Anatomical study comparing transobturator/transgluteal
424 versus single incision techniques. *Neurourol Urodyn.* 2018;37(3):1024-1030.
- 425 35. Huebner M, Rall K, Brucker SY, Reisenauer C, Siegmann-Luz KC, DeLancey JO.
426 The rectovaginal septum: visible on magnetic resonance images of women with
427 Mayer-Rokitansky-Kuster-Hauser syndrome (Mullerian agenesis). *Int Urogynecol*
428 *J.* 2014;25(3):323-327.

- 429 36. Rovner ES, Ginsberg DA. Posterior vaginal wall prolapse: transvaginal repair of
430 pelvic floor relaxation, rectocele, and perineal laxity. *Tech Urol.* 2001;7(2):161-
431 168.
- 432 37. Bureau M, Carlson KV. Pelvic organ prolapse: A primer for urologists. *Can Urol*
433 *Assoc J.* 2017;11(6Suppl2):S125-s130.
- 434 38. Florian-Rodriguez ME, Hare A, Chin K, Phelan JN, Ripperda CM, Corton MM.
435 Inferior gluteal and other nerves associated with sacrospinous ligament: a cadaver
436 study. *Am J Obstet Gynecol.* 2016;215(5):646.e641-646.e646.
- 437 39. Maldonado PA, Carrick KS, Montoya TI, Corton MM. Posterior Vaginal
438 Compartment Anatomy: Implications for Surgical Repair. *Female Pelvic Med*
439 *Reconstr Surg.* 2019.
- 440 40. Pollak J, Takacs P, Medina C. Complications of three sacrospinous ligament
441 fixation techniques. *Int J Gynaecol Obstet.* 2007;99(1):18-22.
- 442 41. Jacobson P. Vulvovaginal (Bartholin) cyst treatment by marsupialization. *West J*
443 *Surg Obstet Gynecol.* 1950;58(12):704-708.
- 444 42. Apostolis CA, Von Barga EC, DiSciullo AJ. Atypical presentation of a vaginal
445 epithelial inclusion cyst. *J Minim Invasive Gynecol.* 2012;19(5):654-657.
- 446 43. Nicholls MJ, Dunham R, O'Herlihy S, Finan PJ, Sagar PM, Burke D. Measurement
447 of the anal cushions by transvaginal ultrasonography. *Dis Colon Rectum.*
448 2006;49(9):1410-1413.
- 449 44. Yeung J, Pauls RN. Anatomy of the Vulva and the Female Sexual Response.
450 *Obstet Gynecol Clin North Am.* 2016;43(1):27-44.

- 451 45. Wallner C, Maas CP, Dabhoiwala NF, Lamers WH, DeRuiter MC. Innervation of
452 the pelvic floor muscles: a reappraisal for the levator ani nerve. *Obstet Gynecol.*
453 2006;108(3 Pt 1):529-534.
- 454 46. Barber MD, Bremer RE, Thor KB, Dolber PC, Kuehl TJ, Coates KW. Innervation
455 of the female levator ani muscles. *Am J Obstet Gynecol.* 2002;187(1):64-71.
- 456 47. Katrikh AZ, Ettarh R, Kahn MA. Cadaveric Nerve and Artery Proximity to
457 Sacrospinous Ligament Fixation Sutures Placed by a Suture-Capturing Device.
458 *Obstet Gynecol.* 2017;130(5):1033-1038.
- 459 48. Le A, Shan L, Wang Z, Dai X, Xiao T, Shen Y. Transvaginal repair of rectovaginal
460 fistula by filling with bulbocavernosus fat pad and retaining scar tissue. *Clin Exp*
461 *Obstet Gynecol.* 2014;41(5):587-589.
- 462 49. Onodera H, Nagayama S, Kohmoto I, Maetani S, Imamura M. Novel surgical
463 repair with bilateral gluteus muscle patching for intractable rectovaginal fistula.
464 *Tech Coloproctol.* 2003;7(3):198-202.
- 465 50. Cundiff GW, Weidner AC, Visco AG, Addison WA, Bump RC. An anatomic and
466 functional assessment of the discrete defect rectocele repair. *Am J Obstet Gynecol.*
467 1998;179(6 Pt 1):1451-1456; discussion 1456-1457.
- 468 51. Ghafar MA, Chesson RR, Velasco C, Slocum P, Winters JC. Size of urogenital
469 hiatus as a potential risk factor for emptying disorders after pelvic prolapse repair.
470 *J Urol.* 2013;190(2):603-607.
- 471 52. Milani R, Frigerio M, Vellucci FL, Palmieri S, Spelzini F, Manodoro S.
472 Transvaginal native-tissue repair of vaginal vault prolapse. *Minerva Ginecol.*
473 2018;70(4):371-377.

- 474 53. Richardson AC. The rectovaginal septum revisited: its relationship to rectocele and
475 its importance in rectocele repair. *Clin Obstet Gynecol.* 1993;36(4):976-983.
- 476 54. Stecco C, Macchi V, Porzionato A, et al. Histotopographic study of the
477 rectovaginal septum. *Ital J Anat Embryol.* 2005;110(4):247-254.
- 478 55. Barbalat Y, Tunuguntla HS. Surgery for pelvic organ prolapse: a historical
479 perspective. *Curr Urol Rep.* 2012;13(3):256-261.
- 480 56. Fowler R, Jr. Landmarks and legends of the anal canal. *Aust N Z J Surg.*
481 1957;27(1):1-18.
- 482 57. Nano M, Ferronato M, Solej M, D'Amico S. A novel technique for rectocele repair
483 in elderly women. *Techniques in coloproctology.* 2007;11(2):149-151.
- 484 58. Mercedes RL, Pisi PH, Balestrim Filho A, Braga TA, Rocha JJ, Feres O. Surgical
485 treatment of traumatic cloaca. *Acta Cir Bras.* 2008;23 Suppl 1:105-107; discussion
486 107.
- 487 59. Merchea A, Larson DW, Hubner M, Wenger DE, Rose PS, Dozois EJ. The value
488 of preoperative biopsy in the management of solid presacral tumors. *Dis Colon*
489 *Rectum.* 2013;56(6):756-760.
- 490 60. Stricker JW, Schoetz DJ, Jr., Collier JA, Veidenheimer MC. Surgical correction of
491 anal incontinence. *Diseases of the colon and rectum.* 1988;31(7):533-540.
- 492 61. Baker HW. Dyspareunia due to conditions of the introitus. *J Ky Med Assoc.*
493 1964;62:122-124.
- 494 62. Lukacz ES, Lubner KM. Rectocele repair: when and how? *Curr Urol Rep.*
495 2002;3(5):418-422.

- 496 63. Miklos JR, Kohli N, Moore R. Levatorplasty release and reconstruction of
497 rectovaginal septum using allogenic dermal graft. *Int Urogynecol J Pelvic Floor*
498 *Dysfunct.* 2002;13(1):44-46.
- 499 64. Angioni S, Pontis A, Dessole M, Surico D, De Cicco Nardone C, Melis I. Pain
500 control and quality of life after laparoscopic en-block resection of deep infiltrating
501 endometriosis (DIE) vs. incomplete surgical treatment with or without GnRHa
502 administration after surgery. *Arch Gynecol Obstet.* 2015;291(2):363-370.
- 503 65. Stadnik H, Kościński TM. Prosthetic materials for treating posterior vaginal wall
504 prolapse and rectocele - own experience. *Ginekol Pol.* 2016;87(11):729-732.
- 505 66. Tamakawa M, Murakami G, Takashima K, Kato T, Hareyama M. Fascial
506 structures and autonomic nerves in the female pelvis: a study using macroscopic
507 slices and their corresponding histology. *Anatomical science international.*
508 2003;78(4):228-242.
- 509 67. Kraima AC, West NP, Treanor D, et al. Whole mount microscopic sections reveal
510 that Denonvilliers' fascia is one entity and adherent to the mesorectal fascia;
511 implications for the anterior plane in total mesorectal excision? *European journal*
512 *of surgical oncology : the journal of the European Society of Surgical Oncology*
513 *and the British Association of Surgical Oncology.* 2015;41(6):738-745.
- 514 68. Baskett T. *On the Shoulders of Giants: Eponyms and Names in Obstetrics and*
515 *Gynecology.* London: RCOG Press; 1996.
- 516 69. Lydiatt DD, Bucher GS. The historical evolution of the understanding of the
517 submandibular and sublingual salivary glands. *Clinical anatomy (New York, NY).*
518 2012;25(1):2-11.

- 519 70. Mortazavi MM, Adeeb N, Latif B, et al. Gabriele Fallopio (1523-1562) and his
520 contributions to the development of medicine and anatomy. *Childs Nerv Syst.*
521 2013;29(6):877-880.
- 522 71. Committee on Gynecologic P. Elective Female Genital Cosmetic Surgery: ACOG
523 Committee Opinion, Number 795. *Obstetrics and gynecology.* 2020;135(1):e36-
524 e42.
- 525 72. DeLancey JO. Structural anatomy of the posterior pelvic compartment as it relates
526 to rectocele. *Am J Obstet Gynecol.* 1999;180(4):815-823.
- 527 73. Zhai L-D, Liu J, Li Y-S, Yuan W, He L. Denonvilliers' fascia in women and its
528 relationship with the fascia propria of the rectum examined by successive slices of
529 celloidin-embedded pelvic viscera. *Diseases of the colon and rectum.*
530 2009;52(9):1564-1571.
- 531 74. Kleeman SD, Westermann C, Karram MM. Rectoceles and the anatomy of the
532 posteriorvaginal wall: revisited. *Am J Obstet Gynecol.* 2005;193(6):2050-2055.
- 533 75. Dariane C, Moszkowicz D, Peschaud F. Concepts of the rectovaginal septum:
534 implications for function and surgery. *Int Urogynecol J.* 2016;27(6):839-848.

535

English	Latin	Unique Identification Number	Number of publications that used the English or Latin term	Non-preferred Synonyms (# of publications that used this term)
Vulva				
Anterior commissure	<i>Commissura labiorum anterior</i>	A09.2.01.004	2	
Bulb of vestibule	<i>Bulbus vestibuli</i>	A09.2.01.013	11	Clitoral bulb (2)
Greater vestibular gland	<i>Glandula vestibularis major</i>	A09.2.01.016	4	Bartholin's gland (19), Major vestibular gland (1), Vestibular gland (3)
Perineal body	<i>Corpus perineale; Centrum perinei</i>	A09.5.00.005	35	Central tendon (3)
Clitoral body	<i>Corpus clitoridis</i>	A09.2.02.003	14	
Clitoral crus	<i>Crus clitoridis</i>	A09.2.02.002	3	
Clitoral frenulum	<i>Frenulum clitoridis</i>	A09.2.01.010	8	
Clitoral glans	<i>Glans clitoridis</i>	A09.2.02.004	18	
Clitoral prepuce	<i>Preputium clitoridis</i>	A09.2.01.009	14	Clitoral hood (8)
Clitoris	<i>Clitoris</i>	A09.2.02.001	27	
Corpora cavernosa	<i>Corpus cavernosum clitoridis</i>	A09.2.02.005	5	
Crura/s	<i>Crus Clitoridis</i>	A09.2.02.002	6	
Paraurethral ducts	<i>Ductus paraurethrales</i>	A09.2.03.015	2	Skene's glands ducts (2)
Female external genitalia	<i>Organa genitalia feminine externa</i>	A09.2.00.001	2	

Vestibular fossa	<i>Fossa vestibuli vaginae</i>	A09.2.01.012	0	Fossa navicularis (3)
Labium Majus	<i>Labium majus pudendia</i>	A09.2.01.003	9	Labia majora (30), Greater labia (1)
Hymen	<i>Hymen</i>	A09.1.04.008	16	Hymenal ring (8)
Vaginal orifice	<i>Ostium vaginae</i>	A09.2.01.015	3	Introitus (41), Vaginal entrance (1), Vaginal opening (1), Vaginal outlet (1)
Labium Minus	<i>Labium minus pudendi</i>	A09.2.01.007	4	Labia minora (31)
Mons pubis	<i>Mons pubis</i>	A09.2.01.002	8	
Hymenal caruncle	<i>Caruncle hymenales</i>	A09.1.04.009	8	
Lesser vestibular glands	<i>Glandulae vestibulares minores</i>	A09.2.01.017	0	Paraurethral glands (2), Skene's glands (2)
Perineum	<i>Perineum</i>	A09.5.00.001	52	
Perineal Membrane	<i>Membrana perinei</i>	A09.5.03.002	12	Superficial perineal membrane (4)
Posterior commissure	<i>Commissura labiorum posterior</i>	A09.2.01.004	5	
Fourchette	<i>Frenulum labiorum pudenda</i>	A09.2.01.008	3	Posterior fourchette (9), vaginal fourchette (2)
Vulva	<i>Vulva; pudendum</i>	A09.2.01.001	43	
Suspensory ligament	<i>Ligamentum fundiforme clitoridis</i>	A04.5.02.019	4	
Urogenital hiatus	<i>Hiatus urogenitalis</i>	A04.5.04.010	4	
Vestibule	<i>Vestibulum vaginae</i>	A09.2.01.012	20	Vulvar vestibule (2)
Musculoskeletal				

Ala of sacrum	<i>Ala ossis sacri</i>	A02.2.05.004	1	
Pudendal Canal	<i>Canalis pudendalis</i>	A09.5.04.003	13	Alcock's canal (13)
Superior gemellus	<i>Musculi gemellus superior</i>	A04.7.02.013	2	
Perineal muscles	<i>Musculi perinei</i>	A04.5.05.001	1	
Anterior sacral foramen	<i>Foramina sacralia anteriora</i>	A02.2.05.012	3	Sacral foramen (1)
Bulbospongiosus muscle	<i>Musculi bulbospongiosus</i>	A09.5.02.005	10	Bulbocavernosus (16)
Coccygeus muscle	<i>Musculi ischiococcygeus ; musculi coccygeus</i>	A04.5.04.11	18	
Coccyx	<i>Os occygis</i>	A02.2.06.001	22	
Gluteus maximus muscle	<i>Musculi gluteus maximus</i>	A04.7.02.006	15	
Gluteus medius muscle	<i>Musculi gluteus medius</i>	A04.7.02.007	8	
Greater sciatic foramen	<i>Foramen ischiadicum majus</i>	A03.6.03.008	16	Sciatic foramen (1), infrapiriform foramen (1)
Greater sciatic notch	<i>Incisura ischiadica major</i>	A02.5.01.009	11	Sciatic notch (1)
Ilium	<i>Os ilium; ilium</i>	A02.5.01.101	11	
Iliac crest	<i>Crista iliaca</i>	A02.5.01.106	5	
Iliac fossa	<i>Fossa iliaca</i>	A02.5.01.115	3	
Iliacus	<i>Iliacus</i>	A04.7.02.003	1	
Iliococcygeus muscle	<i>Musculi iliococcygeus</i>	A04.5.04.008	19	
Inferior gemellus muscle	<i>Musculi gemellus inferior</i>	A04.7.02.014	2	
Pubic tubercle	<i>Tuberculum pubicum</i>	A02.5.01.303	1	
Inguinal canal	<i>Canalis inguinales</i>	A04.5.01.026	2	
Pubovesicalis muscle	<i>Musculi pubovesicalis</i>	A04.5.03.014	1	
Ischial rami	<i>Ramus ossis ischii</i>	A02.5.01.203	2	

Ischiocavernosus muscle	<i>Musculi ischiocavernosus</i>	A09.5.02.004	11	
Ischium	<i>Os ischii; ischium</i>	A02.5.01.201	11	
Lesser sciatic foramen	<i>Foramen ischiadicum minus</i>	A03.6.03.009	11	
Pelvic parietal peritoneum	<i>Peritoneum parietale</i>	A10.1.02.005	1	Peritoneum of the cul de sac (1)
Pelvic inlet	<i>Apertura pelvis superior</i>	A02.5.02.008	1	
Pelvic outlet	<i>Apertura pelvis inferior</i>	A02.5.02.009	1	
Piriformis muscle	<i>Musculi piriformis</i>	A04.7.02.011	38	
Posterior superior iliac spine	<i>Spina iliaca posterior inferior</i>	A02.5.01.114	8	
Posterior sacral foramen	<i>Foramina sacralia posteriora</i>	A02.2.05.015	1	
Promontory	<i>Promontorium</i>	A02.2.05.003	1	Sacral promontory (5)
Psoas muscle	<i>Musculi psoas major Musculi psoas minor</i>	A04.7.02.004 A04.7.02.005	4	
Rectococcygeus muscle	<i>Musculi rectococcygeus</i>	A05.7.04.011	2	
Quadratus femoris muscle	<i>Musculi quadratus femoris</i>	A04.7.02.015	2	
Sacrum	<i>Os sacrum; vertebrae sacrales</i>	A02.2.05.001	31	Sacral body (1)
Sacral base	<i>Basis ossis sacri</i>	A02.2.05.002	1	
Sacral canal	<i>Canalis sacralis</i>	A02.2.05.019	1	
Sacrococcygeal joint	<i>Articulatio sacroiliaca</i>	A03.6.03.001	10	
Sacral hiatus	<i>Hiatus saacralis</i>	A02.2.05.020	1	
Superficial transverse perineal muscle	<i>Musculi transversus perinei</i>	A09.5.02.003	21	

	<i>superficialis</i>			
External anal sphincter muscle	<i>Musculi sphincter ani externus</i>	A04.5.04.012	61	
Subcutaneous external anal sphincter muscle	<i>Musculi sphincter ani externus pars subcutanea</i>	A04.5.04.013	4	
Internal anal sphincter muscle	<i>Musculi sphincter ani internus</i>	A05.7.05.011	34	
Superficial external anal sphincter muscle	<i>Musculi sphincter ani externus pars superficialis</i>	A04.5.04.014	5	
Anus				
Anus	<i>Anus</i>	A05.7.05.013	11	Anal orifice (2), anal aperture (1)
Anal canal	<i>Canalis analis</i>	A05.7.05.001	28	
Anocutaneous line	<i>Linea anocutanea</i>	A05.7.05.008		Anal verge (1)
Pectinate line	<i>Pecten analis</i>	A05.7.009	1	Dentate line (1)
Vagina				
Posterior vaginal fornix	<i>Fornix vaginae pars posterior</i>	A09.1.04.004	1	
Posterior vagina	<i>Paries posterior</i>	A09.1.04.007	33	
Ligaments/Fascia				
Rectovaginal fascia; Rectovaginal septum	<i>Fascia rectovaginalis; septum rectovaginale</i>	A04.5.03.004	33	Denovillier's fascia (7), rectogenital fascia (1), rectogenital septum (1), prerectal fascia (1)
Iliococcygeal raphe	<i>Raphe muscoli iliococcygei</i>	A04.5.04.018	2	
Inguinal ligament	<i>Ligamentum inguinale; arcus inguinalis</i>	A04.5.01.009	1	
Anococcygeal body; Anococcygeal	<i>Corpus anococcygeum; ligamentum</i>	A04.5.04.016	6	Anococcygeal raphe (1)

ligament	<i>anococcygeum</i>			
Anterior sacrococcygeal ligament	<i>Ligamentum sacrococcygeum anterius/ventrale</i>	A03.2.08.004	1	
Sacrococcygeal joint	<i>Articulatio sacroccocygea</i>	A03.2.08.001	1	
Sacrospinous ligament	<i>Ligamentum sacrospinale</i>	A03.6.03.007	38	
Sacrotuberous ligament	<i>Ligamentum sacrotuberale</i>	A03.6.03.005	25	
Vasculature				
Perineal artery	<i>Arteria perinalis</i>	A12.2.15.040	10	Artery to the bulbocavernosus (1)
Deep artery of the clitoris	<i>Arteria profunda clitoridis</i>	A12.2.15.045	0	Clitoral artery (6)
Anterior labial artery	<i>Labiales anteriores</i>	A12.2.16.015	1	Labial artery (3), labial branch (1), labial minora artery (1)
Posterior labial artery	<i>Labiales posteriores</i>	A12.2.15.041	4	
Artery to the bulb	<i>Arteria bulbi vestibuli</i>	A12.2.15.043	5	
Circumflex gluteal artery	<i>Arteria circumflexa ilium profunda</i>	A12.2.16.008	1	
Coccygeal artery	<i>Glomus coccygeum</i>	A12.2.12.011	3	
Common iliac artery	<i>Arteria iliaca communis</i>	A12.2.14.001	2	
Deep dorsal vein of the clitoris	<i>Venae dorsalis profunda clitoridis</i>	A12.3.10.014	3	Dorsal vein of the clitoris (2)
Deep external pudendal artery	<i>Arteria pudenda externa profunda</i>	A12.2.16.014	1	
Dorsal artery of the clitoris	<i>Arteria dorsalis clitoridis</i>	A12.2.15.044	8	
Inferior rectal artery	<i>Arteria rectalis inferior</i>	A12.2.15.039	7	External hemorrhoidal artery (1), inferior

				hemorrhoidal artery (1)
Inferior rectal vein	<i>Venae rectales inferiores</i>	A12.3.10.021	6	External hemorrhoidal vein (1), inferior rectal venous plexus (1)
Iliolumbar artery	<i>Arteria iliolumbas</i>	A12.2.15.003	3	
Inferior gluteal artery	<i>Arteria glutea inferior</i>	A12.2.15.018	21	
Inferior gluteal vein	<i>Venae gluteae inferiores</i>	A12.3.10.006	3	
Internal pudendal artery	<i>Arteria pudenda interna</i>	A12.2.15.038	26	Inferior pudendal artery (1)
Internal iliac artery	<i>Arteria iliaca interna</i>	A12.2.15.001	5	
Internal iliac vein	<i>Vena iliaca interna</i>	A12.3.10.004	2	
Internal pudendal vein	<i>Venae pudenda interna</i>	A12.3.10.019	8	
Lateral sacral arteries	<i>Arteria sacrales laterales</i>	A12.2.15.006	0	Sacral artery (4)
Vaginal artery	<i>Arteria vaginalis</i>	A12.2.15.035	1	
Median sacral artery	<i>Arteria sacralis mediana</i>	A12.2.12.08	2	
Middle rectal artery	<i>Arteria rectalis media</i>	A12.2.15.036	7	Middle hemorrhoidal artery (1)
Middle rectal veins	<i>Venae rectales mediae</i>	A12.3.10.018	3	Middle hemorrhoidal vein (1)
Obturator artery	<i>Arteria obturatoria</i>	A12.2.15.008	4	
Obturator vein	<i>Venae obturatoriae</i>	A12.3.10.007	2	
Posterior labial vein	<i>Venae labiales posteriores</i>	A12.3.10.022	2	
Superior gluteal artery	<i>Arteria glutea superior</i>	A12.2.15.013	10	
Superior gluteal vein	<i>Venae gluteae superiores</i>	A12.3.10.005	2	
Superior rectal	<i>Arteria rectalis</i>	A12.2.12.073	2	Superior

artery	<i>superior</i>			hemorrhoidal artery (8)
Superior rectal vein	<i>Venae rectalis superior</i>	A12.3.12.035	1	Superior hemorrhoidal vein (3)
Vaginal artery	<i>Arteria vaginalis</i>	A12.2.15.035	6	
Vaginal venous plexus	<i>Plexus venosus vaginalis</i>	A12.3.10.017	2	Vaginal vein (2)
Vein of the bulb of the vestibule	<i>Venae bulbi vestibuli</i>	A12.3.10.023	1	
Sacral venous plexus	<i>Plexus venosus sacralis</i>	A12.3.10.009	1	
Regions/Spaces				
Anal triangle	<i>Regio analis</i>	A01.2.06.002	2	
Anorectal junction	<i>Junctio anorectalis</i>	A05.7.05.003	4	
Urogenital peritoneum	<i>Peritoneum urogenitale</i>	A10.01.02.051	0	Cul de sac peritoneum (2)
Intersphincteric groove	<i>Sulcus intersphinctericus</i>	A05.7.05.012	2	
Female genital system	<i>Systema genitale femininum</i>	A09.0.00.001	3	Genital tract (1)
Urogenital triangle	<i>Regio urogenitalis</i>	A01.2.06.003	3	
Deep perineal pouch; deep perineal space	<i>Saccus profundus perinei; spatium profundum perinei</i>	A09.5.03.001	1	
Ischio-anal fossa	<i>Fossa ischioanalis</i>	A09.5.04.001	10	Ischioanal fossa (17), ischioanal space (2)
Recto-uterine pouch	<i>Excavatio rectouterine</i>	A10.1.02.512	5	Pouch of Douglas (2)
Recto-uterine fold	<i>Plica rectouterine</i>	A10.1.02.511	1	
Superficial perineal pouch; superficial perineal	<i>Compartimentum superficial perinei; spatium</i>	A09.5.02.001	1	

compartment; superficial perineal space	<i>superficiale perinei</i>			
Nerves/lymph				
Sacral nerve	<i>Nervi Sacrales;</i>	A14.2.06.001	11	Sacral roots (3), sacral segments (1)
Sacral splanchnic nerves	<i>Nervi splanchnici sacrales</i>	A14.3.01.036	3	
Sacral ganglia	<i>Ganglia sacralia</i>	A14.3.01.035		Sacral ventral trunk (1), sacral parasympathetic plexus (1)
Perineal nerve	<i>Nervi perineales</i>	A14.2.07.039	16	Accessory nerve to the perineal muscles (1)
Inferior anal nerves; inferior rectal nerve	<i>Nervi anales inferiores; nervi rectales inferiores</i>	A14.2.07.038	17	Anal branch of pudendal nerve (1), inferior hemorrhoidal nerve (1)
Dorsal nerve of the clitoris	<i>Nervi dorsalis clitoridis</i>	A14.2.07.042	16	Clitoral nerve (2), anterior nerve branch of the clitoris (2)
Coccygeal nerve	<i>Nervi coccygeus</i>	A14.2.07.043	2	
Coccygeal plexus	<i>Plexus coccygeus</i>	A14.2.07.044	2	
Deep inguinal lymph nodes	<i>Nodi inguinales profundi</i>	A13.05.007	2	
Ganglion impar	<i>Ganglion impar</i>	A14.3.01.037	1	
Genital branch of the genitofemoral nerve	<i>Nervi genitofemoralis genitalis</i>	A14.2.07.009	1	
Femoral branch of the genitofemoral nerve	<i>Nervi genitofemoralis femoralis</i>	A14.2.07.010	1	
Genitofemoral nerve	<i>Nervi genitofemoralis</i>	A14.2.07.008	4	
Hypogastric	<i>Nervi</i>	A14.3.03.047	5	

nerve	<i>hypogastricus</i>			
Iliohypogastric nerve; iliopubic nerve	<i>Nervi iliohypogastricus; nervi iliopubicus</i>	A14.2.07.003	2	
Ilio-inguinal nerve	<i>Nervi ilioinguinalis</i>	A14.2.07.006	5	
Inferior gluteal nerve	<i>Nervi gluteus inferior</i>	A14.2.07.032	8	Posterior gluteal nerve (1)
Inferior hypogastric plexus; pelvic plexus	<i>Plexus hypogastricus inferior; Plexus pelvicus</i>	A14.3.03.048	12	
Posterior labial nerves	<i>Nervi labiales posteriores</i>	A14.2.07.040	1	
Obturator nerve	<i>Nervi obturatorius</i>	A14.2.07.12	9	
Pelvic ganglia	<i>Ganglia pelvica</i>	A14.3.02.017	1	Pelvic autonomic plexus (1)
Pelvic splanchnic nerve; parasympathetic root	<i>Nervi splanchnici pelvici; radix parasympathica</i>	A14.3.02.18	8	
Perforating cutaneous nerve	<i>Nervi cutaneus perforans</i>	A14.2.07.036	1	
Perineal branch of the posterior cutaneous nerve of the thigh	<i>Nervi cutaneus femoris posterior perineales</i>	A14.2.07.035	1	
Sacral plexus	<i>Plexus sacralis</i>	A14.2.07.027	11	
Sciatic nerve	<i>Nervi ishiadicus</i>	A14.2.07.046	34	
Anococcygeal nerve	<i>Nervi anococcygeus</i>	A14.2.07.045	1	
Superficial inguinal lymph nodes	<i>Nodi inguinales superficiales</i>	A13.3.05.003	5	
Superior gluteal nerve	<i>Nervi gluteus superior</i>	A14.2.07.031	4	
Superior hypogastric plexus; presacral nerve	<i>Plexus hypogastricus superior; nervi presacralis</i>	A14.3.03.046	2	

External iliac lymph nodes	<i>Nodi iliaci externi</i>	A13.3.04.009	2	
Inferior gluteal lymph nodes	<i>Nodi gluteales inferiores</i>	A13.3.04.019	1	
Inguinal lymph nodes	<i>Nodi lymphoidei inguinales</i>	A13.3.05.002	7	Inguinofemoral lymph nodes (3)
Interiliac nodes	<i>Nodi interiliaci</i>	A13.3.04.016	4	

537

538

539 Table 2. Proposed Terms

Regional Terms			
English	Number of publications that used the term	Non-preferred Synonyms (# of publications that used this term)	Definition
Anal sphincter complex	4		A descriptive term to include all portions of the external and internal anal sphincter musculature.
Anorectum	6		Area where the rectum fuses with the anal canal during embryological development.
Genital-crural fold	1	Groin crease, Genital-femoral fold	The indentation between the upper medial thigh and the lateral aspect of the labium majus.
Interlabial sulcus	1	Labial sulcus (1)	The groove where the medial aspect of the labium majus and lateral aspect of the labium minus intersect.
Posterior vaginal compartment	6		A region that includes the posterior vaginal wall from the perineal body epithelium distally to the recto-uterine peritoneal fold proximally. It extends dorsally to the anterior rectal and anal walls and laterally to where the lateral walls of the posterior vagina join the connective tissue that attach to the bony pelvis.

Sacrospinous-coccygeus complex	4		A descriptive term to include both the sacrospinous ligament and overlying coccygeus muscle.
Structural Terms			
Greater vestibular gland duct	2	Bartholin's gland duct (2)	A duct that supplies the greater vestibular gland.
Anal cushions	2	Endovascular cushions (1)	Mucosal vascular prominences formed by clusters of veins surrounding the anal canal.
Nerve to the levator ani	6		A nerve originating from sacral foramina (S3-5) that supplies the levator ani muscles.
Labial fat pad	1	Bulbocavernosus fat pad (1)	The fat that underlies the labium majus and is used during creation of the Martius labial interposition flap for pelvic surgery.
Spaces			
Deep postanal space	1		The space between the levator ani and the anococcygeal body. Anterior border is the deep external anal sphincter, superior border is the levator ani, and inferior border is the superficial anal sphincter as it inserts to the coccyx via the anococcygeal ligament. The space is contiguous with the ischioanal fossa.

540

541

542

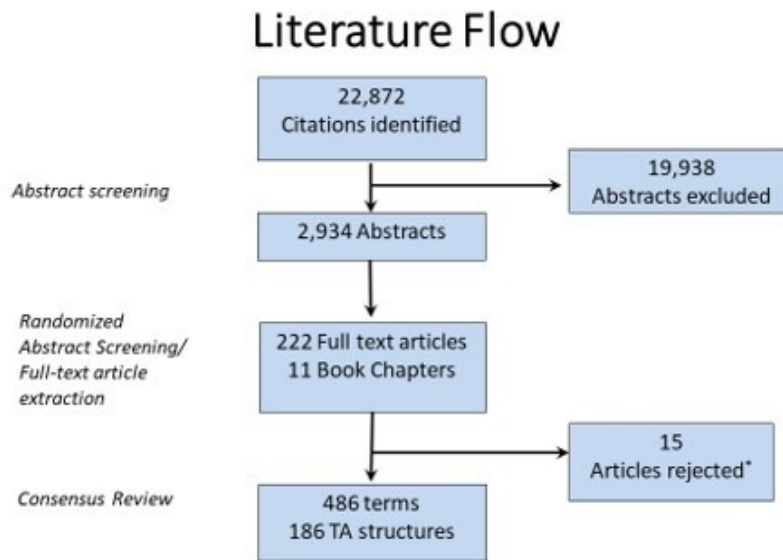
543 FIGURE LEGENDS

544 1. Literature Flow

545 2. Inferior view of female perineum and vulvar structures. Contents in superficial pouch
546 of urogenital triangle and anal triangle are shown.

547 3. Sagittal view of female posterior pelvis. Superficial pouch of urogenital triangle with
548 perineal muscles on left, removed on the right. Perineal membrane separates the
549 superficial pouch of the urogenital triangle from the deep pouch.

Figure 1.



TA: *Terminologia Anatomica*

*Articles were rejected if they contained male anatomy, abnormal pathology, and/or lacked predefined anatomic terms

