Juan José Vilanova Rodriguez
Patólogo y Profesor UPV
17-02-2015
Queridos responsables:

Adjunto os remito el porta del caso que presentará nuestro hospital en la 149ª/CXLIX Reunión de nuestra Regional Norte, organizada por el Servicio de Anatomía Patológica de la Clínica de La Asunción de Tolosa (Guipúzcoa o Gipuzkoa), a celebrarse el 13 de marzo 2015 a las 09:45 horas en el Teatro TOPIC de la Atenea, Leal, Ilustre y Valerosa villa de TOLOSA.

Hasta entonces, con la esperanza de ilusión de vernos allí, saludos cordiales.

José Mari Arrinda
Hondarribia 26 de febrero 2015

**Historia:**

Lesión cutánea solitaria en pene, a estudio (según consta en D.C. del volante)

Se remite un porta.
Historia

- Varón 39 años

Lesión en cuerpo de pene.
DC: Lesión cutánea a estudio
15. Val-Bernal JF, Hernandez-Nieto E. Benign mucinous metaplasia of the penis. A lesion resembling...
and secretions collected in this space (39). There has been some question about the existence of the Tyson’s gland (39,40). Several studies with numerous tissue sections failed to demonstrate these glands (39,41,42). We could not find Tyson’s glands in a pathologic study of 65 sectioned penises removed for carcinoma of the penis. Apparently the original descriptions by Tyson (43) were based on an animal study that could not be confirmed in humans. After circumcision occasionally some sebaceous glands can be found in the mucosa adjacent to the skin. They are probably skin sebaceous glands misplaced after surgery.
Penis

Normal anatomy

The main anatomic components of the penis are the corpus (the body) and the prepuce (foreskin). The corpus is composed of the corpora cavernosa, a net of vascular spaces surrounded by the tunica albuginea, and an inferiorly located corpus spongiosum, in the center of which runs the urethra. All of these structures are covered by skin, a smooth muscle layer known as dartos, and an elastic sheath designated the suspensory ligament. The latter separates the penis into dorsal (corpora cavernosa) and ventral (corpus spongiosum) portions, a distinction highlighted by radiologic techniques.

The skin of the glans is made up of nonkeratinized stratified squamous epithelium, five to six cell layers thick; this becomes keratinized in circumcised individuals. The glans is separated from the shaft by the balanoprostatic sulcus in the dorsal and lateral aspects and by the frenulum in the ventral aspect. Modified sebaceous glands, known as Tyson glands and responsible for the production of smegma, are said to occur in the balanopreputial sulcus, but if they truly occur in humans (as in orangutans, as described by Tyson in 1699), they must be very rare, since several studies have failed to demonstrate their presence.

The male urethra is divided into three portions: prostatic (the segment surrounded by the prostate), membranous or bulbourethral (extending from the lower pole of the prostate to the bulb of the spongiosum), and penile (which passes longitudinally through the corpus spongiosum). The terminal enlarged portion of the penile urethra is the fossa navicularis. The penile urethra contains numerous lymphocytes, plasma cells, and the epithelium expresses secretory components that this region is an active site of secretory IgA mediated immunity.

Microscopically, the lining of the urethra is of transitional type (prostatic) portion, of stratified squamous type in the distal portion corresponding to the fossa navicularis, and of stratified or pseudostratified columnar epithelium in the rest of the canal. Squamous metaplasia of this epithelium is a common occurrence after estrogen administration, as reported in a group of transsexual individuals before surgery, and structures associated with the urethra are the intraepithelial lacunae (one-layer cylindrical intraepithelial glands), Littre glands, mucous glands present along the full length of the corpus in the bulbourethral or Cowper glands (mucous acinar structures at the level of the membranous urethra).
Diagnóstico

Ectopia de glandulas sebáceas en glande = a Glándulas de Tyson.

2. Rosai 9 Edition
   (Previas: Mutis por el foro)
Sebaceous glands are present throughout the skin of the body except for the palms and soles. They are normally associated with hair follicles, forming “pilosebaceous units.”

So-called ectopic or “free” sebaceous glands without hair follicles may occur, sometimes in the form of tiny yellow papules, for example:

- Oral cavity (Fordyce spots),
- Penis (Tyson glands),
- Nipple (Montgomery tubercles),
- Esophagus, and Parotid gland (1,2).

Brady, Aidan M.B.; McCluggage, W. Glenn F.R.C.Path.

Ectopic folliculosebaceous units at the coronal sulcus

Tyson glands were described in the 17th century as modified sebaceous glands of the coronal sulcus of the penis. However, this description and other early texts supporting the existence of Tyson glands were not accompanied by illustrations. The existence of such glands has been passing through the literature without adequate graphical demonstration, which has contributed to controversial debates. Herein we present a case of a partial penectomy performed on a 65-year-old man with a squamous cell carcinoma of the penis. In this case we identified sebaceous glands as well as folliculosebaceous units in the coronal sulcus. We also comparatively examined 12 cases of partial penectomy to search for sebaceous glands or folliculosebaceous units in the coronal sulcus or the prepuce. We found neither sebaceous glands nor folliculosebaceous units at the coronal sulcus or the corotonal aspect of the prepuce. We conclude that (1) folliculosebaceous units are possible in the coronal sulcus, as the current case illustrates for the first time in literature and (2) the current case is an oddity, probably induced by the accompanying squamous cell carcinoma, and therefore it may represent an ectopic folliculosebaceous unit rather than an anatomic variation.

Keywords: folliculosebaceous unit, foreskin, prepuce, sebaceous glands, Tyson's glands

Angel Fernandez-Flores A. Ectopic folliculosebaceous units at the coronal sulcus.

Arch Derm—Vol 99, Jan 1969

Sebaceous glands are normally found on the scalp as well as in the cutaneous aspect of the prepuce. However, their existence at the mucosal aspect of the prepuce or at the coronal sulcus has been a matter of controversy for years. The controversy started because of the (unpublished) 17th century description by Edward Tyson of some modified sebaceous glands that he called "Scrotal" glands as the producers of smegma. It has been questioned if Tyson actually described sebaceous glands or instead what is at present known as papillomatosis corona penis. Tyson's glands were mentioned by Cowper some years later with some additional descriptions but without any images or drawings on the subject. This supported the assertion that such glands were indeed an anatomic fact, which has been repeated through history and publications with no images of the condition. Moreover, several attempts from 1904 to the present—microscopically show the existence of such glands in humans have been unsuccessful. This contributed to the controversy surrounding these glands that had been described but not photographed and apparently could not be corroborated. Rather than merely

Tyson's "Glands"

Ectopic Sebaceous Glands and Papillomatosis Penis

Arthur B. Hyman, MD, New York, and CPT Martin H. Braunstein, MC, USAR, Fort Eustis, Va

Tyson noted macroscopic lesions on the corona of the penis, interpreting them as the source of smegma. Later authors described the same lesions under such terms as papillomatosis corona penis. Though the connective tissue nature of the papillomatous protrusions was recognized, they did not equate the condition with that previously observed by Tyson. Since Tyson had used the term "gland," microscopists who found ectopic sebaceous glands on the glans and prepuce referred to them as Tyson's glands, although they are not what Tyson described. Neither papillomatosis corona penis nor ectopic sebaceous glands appear to play a role in the formation of smegma; papillomatosis is not glandular and smegma is not a secretion. It is suggested that the term Tyson's glands be replaced by the appropriate descriptive expression: papillomatosis corona penis or ectopic sebaceous glands.

In 1694, William Cowper wrote:

In that part where the Præputium is contiguous to the Scrotum, he used very good Friends that have discovered certain small Glands... which he calls from the great scent their separated Liquor emits, Glandulae Odoriferae; their Number is uncertain; in those that have the Præputium longer than ordinary, they are not only more, but also larger, and separate a greater quantity of the Juice, which being lodged there, often grows Acrid and corrodes the Glans.

In 1904, Keith and Shillitoe commented:

...we failed to find any trace of Tyson's glands which have been described in every text-book of anatomy published since Tyson's time. To quote from the latest edition of Quain's Anatomy: 'Numerous sebaceous glands are collected round the cervix of the penis and corona glans; they are named the glands of Tyson or glandulae odoriferae, their secretions having a peculiar odour.' It shows the strength of the faith of anatomists that they have for nearly two centuries described glands which have not, and never had, an existence.

Accepted for publication July 8, 1968.
From the Beth Israel Medical Center New York (Dr. Hyman) and McDonald Army Hospital Fort Eustis, Va (CPT Braunstein). Reprint requests to 2 W 87th St, New York 10024 (Dr. Hyman).
Normal anatomy

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The skin of the glans is made up of nonkeratinized stratified squamous epithelium, five to six cell layers thick; it becomes keratinized after circumcision. The glans is separated from the shaft by the bulbar sulcus in the dorsal and lateral aspects and by the frenulum in the anterior region. Modified sebaceous glands, known as Tyson glands and responsible for the production of smegma, are said to occur in apes and orangutans, as described by Tyson in 1699, they must be very rare or not present since several studies have failed to demonstrate their presence.

The male urethra is divided into three portions: prostatic (the segment surrounded by the prostate), membranous or bulbous (extending from the lower pole of the prostate to the bulb of the spongiosum), and penile (which passes longitudinally through the spongiosum). The terminal enlarged portion of the penile urethra is the fossa navicularis. The penile urethra contains numerous plasma cells, and the epithelium expresses secretory components suggesting that this region is an active site of secretory IgA-mediated immunity.

Microscopically, the lining of the urethra is of transitional type (prostatic portion), of stratified squamous type in the distal portion corresponding to the fossa navicularis, and of stratified or pseudostratified ciliated epithelium in the rest of the canal. Squamous metaplasia in this epithelium is a common occurrence after estrogen administration and is reported in a group of transsexual individuals before surgery. Intestinal-type epithelial structures associated with the urethra are the intraepithelial glands of Littre (one-layer cylindrical intraepithelial glands), Littre glands, and mucous glands present along the full length of the corpus spongiosus. The bulbourethral or Cowper glands (mucous acinar structures the level of the membranous urethra).
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FIGURE 4. Traumatically implanted legumes likely underlie PG formation. A. The food in patient specimens was most morphologically similar to histologically processed legumes, including lentils, black beans, kidney beans, pinto beans, navy beans, and lima beans. B. Scanning magnification of a lentil. C. High power of the lentil’s outer surface shows a linear beaded string of cellulose (bracket) overlying honeycomb-shaped starch granules (arc). D. A similar degenerating, linear beaded string was seen (bracket) engulfed by foreign body giant cells in a patient’s hyaline-predominant PG (compare with C). E. High power of the lentil’s center shows honeycomb starch granules. F. A similar degenerating, honeycombed structure was seen surrounded by acute inflammation in a patient’s hyaline-predominant PG (compare with E).
Mila esker denori etortzeagatik eta aurkezpenagatik
Ondo izan eta
“Hainbat ikusi, gehio ikasi”