

# CUTANEOUS EQUIDAE NEOPLASMS IN COSTA RICA: CLINICAL AND PATHOLOGICAL RETROSPECTIVE STUDY (1994-2004)



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**Introduction :** despite there are numerous surveys of equine tumours in North America, Europe and Australia, few of them are specifically related to cutaneous neoplasms. Regarding Latin American and Caribbean the information of occurrence is even less.

**Materials and methods :** a retrospective study including cases from 1994 to 2004 was carried out of all equidae skin biopsies received in the Department of Pathology, Escuela de Medicina Veterinaria, Universidad Nacional, Heredia, Costa Rica. All samples were in formalin fixed then paraffin embedded and processed routinely for histopathological examination and stained with haematoxylin eosin. The records were retrieved and carefully reviewed.

**Results :** during this ten years period, 250 equidae skin biopsies were received. Eighty eight were neoplasms (35.2%), 86 in horses (34.4%) and two in burros (0.8%). The most frequent anatomic location of the three most commonly neoplasms are showing in Fig. 1. Moreover, the main clinical and signalment of them were:

**Sarcoids (SAR):** were found 46 in horses (52.2%) and 2 burros (2.27%) according to breed they were present in 28 Criollos horses (60.8%), 7 Andalusians (15.2%) and 3 Quarter horse (6.5%). There were 26 males (56.5%) and 16 females (37.7%) and in four cases (8.7%) the gender was no reported. The average age was 4.45 years, ranging from 8 months to 23 years. As many as 21 cases (45.6%) were in horses 3 to 5 years old. In 21 horses (45.6%) the sarcoid was a single mass while in 19 horses (39.6%) it was multiple and in 8 cases (17.4%) the presentation was not recorded.

**Squamous cell carcinoma (S.C.C.)** was found in 15 (17.0%) horses. The breed distribution was 10 (66.6%) in Criollo horses. The remaining 5 were from different white colour breeds. In 7 horses (46.6%), the tumour growth was reported in white skin areas, the other 8 the colour was not indicated. The mean age was 8.84, ranged from 5.0 to 14.0 years old. According to sex 8 horses were females and 7 males.

**Melanocytic tumours (MEL)** were diagnostic in 12 cases (13.6%), four horses (33.0%) were Criollos, 3 (25.0%) Andalusians, 3 Iberics, one English and one no recorded. The age range from 4.0 to 22.0 years old (11.6 mean). There were 7 males and 5 females.

**Conclusion :** as it has been publishing already we found the same three most common skin neoplasms however, our data specially with sarcoids and squamous cells tumours have some differences. Suggesting a possible local environmental conditions or the kind of breed with these tumours. See table 1.

**References:** Scott, D.W., Miller, Jr. W.H. Equine Dermatology, 2003, Saunders.



Fig. 1. The main anatomic distribution.



Fig. 2. Two different stages of growth of fibroblastic type sarcoid. The small has been present since 2 weeks, while the large one (insert photo) for around 4 months.

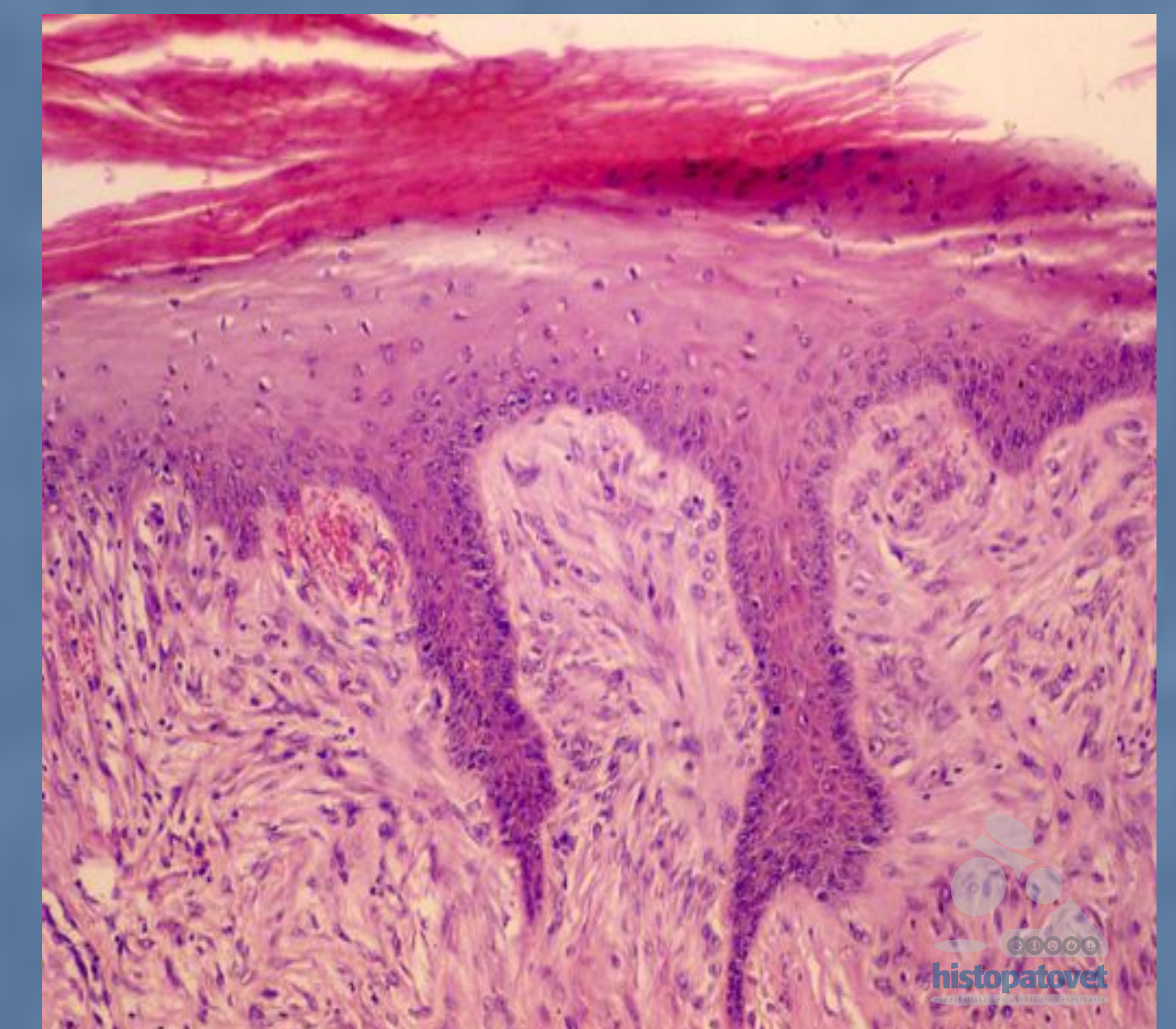


Fig. 3. The characteristic histological features of sarcoid showing a pseudoepitheliomatous hyperplasia, with epithelial pegs. The dermal component consists of fibroblast and collagen fibers arranged in a whorled pattern.



Fig. 4. Facial white area near the lip commissure showing an ulcerative lesion due to a Squamous Cell Carcinoma.

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SAR	54.54%	35.3%	43.6%	38.0%
S.C.C.	17.0% <sup>1</sup>	6.9% <sup>2</sup>	24.6% <sup>3</sup>	23.5% <sup>4</sup>
MEL.	13%	13.9%	3.8%	8.0% <sup>5</sup>

<sup>1</sup>The external genital was excluded, <sup>2</sup>Skin/eye, <sup>3</sup>From several places aside from skin, <sup>4</sup>Skin/eye/genital tract, <sup>5</sup>Skin/oral cavity/genital tract.