

17 spargana collected from 3 cats captured in Kyoto, Japan.

There have been many reports on the morphology of sparganum in the past years. The 246 spargana obtained from the present survey coincided well with the morphological characteristics described in the previous papers. However, there have been no reports concerning the color of spargana which is yellowish in the part 0.5 to 1 cm from the top of the anterior end and on the existence of the relatively big "notch" in the posterior end. It will be interesting to note how the "notch" in spargana develops and functions in its development.

In the present study, the authors identified the adult worms of cestoda as *S. erinacei*: 13 immature or mature worms were recovered from 5 out of 6 dogs infected experimentally (one cestoda obtained from one out of 6 dogs was unidentified as it was immature). As mentioned above, it was clarified that the spargana collected in Hyogo Prefecture, Japan, were the plerocercoids of *S. erinacei* (sparganum mansonii) and the infection rates in cats were 0.5%.

Summary

A survey of sparganum parasitism in stray cats was carried out in Hyogo Prefecture, Japan, during the period from April 1982 to March 1984. A total of 1880 cats were examined and 246 (1 to 166 per cat) spargana were detected from 10 cats (0.5%). The spar-

ganum, milky-white in color, had a flattened, cord-like shape with an undeveloped dimple on the crown (scolex). These characteristics are well coincide with previous papers, however, a remarkable difference was observed: the yellowish scolex and the big cut in the posterior end. The average length and width of the sparganum were 11.5 cm and 0.68 cm, respectively.

All cats harbouring spargana were also parasitized with adults of *Spirometra erinacei*. It means that the cats play the role of both intermediate and final host in the same time.

The spargana obtained were administered to dogs orally. After 9 to 12 days of prepatent period, the adults were recovered and identified as *S. erinacei*. From the result obtained, it was clarified that the spargana recovered from the stray cats in Hyogo Prefecture, Japan, were sparganum mansonii.

References

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兵庫県下におけるネコのマンソン孤虫自然感染例について

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1982年4月から1984年3月までの2年間に兵庫県下で捕獲された不要ネコ1880頭を対象とした孤虫感染状況の疫学調査を実施した。県下のほぼ全域に相当する19市66町につき、それぞれ1～179頭を調査した結果、10頭(0.5%)が孤虫の感染をうけていた。これらのネコは県下の比較的限局された地区から認められた。それらは過去に宇賀ら(1983)が行なったネコの蠕虫類の調査においてマンソン裂頭条虫の寄生率の最も高かった地域と一致していた。孤虫はそれぞれの個体から1～166条が得られた。その形態は(1)頭部(scolex)の先端より1cm程が淡黄色

を呈していた点、(2)後端部に大きな切れ込みが認められた点、を除きほぼ過去の報告と一致していた。これら得られた孤虫の一部を6頭のイヌに経口投与したところ、感染後9～12日目から糞便中の虫卵が陽性となり、6～14日目に剖検したところ小腸から成虫が回収された。これらは頭節、各体節の生殖器の位置や形および虫卵の形態などからマンソン裂頭条虫であると同定された。

以上の結果より、著者らが兵庫県下においてネコから認めた孤虫はマンソン孤虫であることが確かめられた。