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贻贝棘尾虫腹皮层纤毛器形态发生的扫描电镜观察

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摘要 应用扫描电镜术观察到，贻贝棘尾虫无性分裂过程中，处于形态发生区的表膜产生孔洞，于小孔内伸出纤毛芽，组成新纤毛器的原基区；老口围带后1/3部分发生更新，前2/3部分的小膜无明显变化，此后两者共同形成前仔虫的口围带；左、右缘棘毛原基分别在老缘棘毛前端和中部的棘毛瓦解位置产生，此后新的左、右缘棘毛列分别在老缘棘毛的右侧形成. 结果表明，贻贝棘尾虫形态发生中，纤毛器基体是在表膜下发生的，前仔虫口围带结构建成与部分老口围带的更新有关，并且处于形态发生区的老纤毛结构对新结构的形成不但具有物质贡献，并可能具有定位或定向作用.

关键词 贻贝棘尾虫；形态发生；扫描电镜术

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SEM observation on morphogenesis of the ventral cortical ciliatures of Stylonychia mytilus(Chinese)

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Abstract

During the asexual division of *Stylonychia mytilus*, holes were observed on the surface of cell pellicle in the anlagen region by using scanning electron microscope. Then, cilia buds extended from each hole and formed the anlagen region of new ciliatures; 1/3 part of the old adoral zone of membranelles (AZM) was renewed, together with the leftever constitute an intact AZM at the original area which belonged to the proter; The new marginal cirri primordium presents in the front and the middle part of the degenerated site of the old marginal cirri, after that, the new marginal cirri formed at the right area but not the originally area of the old ones. These results show that during the process of morphogenesis, the basal bodies form below the surface of cell pellicle; the constitution of AZM in the proter is related to the renewal of the old AZM, the old cilias which belong to the anlagen region played an important part in the location and orientation of the new structure, what′s more, supplied its development with some substances.

Key words *Stylonychia mytilus* morphogenesis scanning electron microscope (SEM)

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