

The method of cell cultivation by migration from tissue fragments

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The fragments of coelomic epithelium of wounded sea star *Asterias rubens* were cultured using L15 medium with 2% fetal calf serum at temperature 16 °C. The different cells types migrated from these fragments. Part of these cells settled to the surface of plate, another part stayed in suspension. A number of different cells was joined and formed tissue like structures during the 7-10 days of the cultivation. The model of net formation by celomocytes and its contraction allowed to carry out in vitro experiments on interaction of celomocytes with cultured coelomic epithelium fragments. One, two and more fragments were attached to wall of 96-well plate. The celomocyte suspension in CMFSS solution was added into well after the attachment of fragments. In 20 minutes the solution of Ca⁺² at concentration 5 mM was added in this well. The celomocytes began to form the net which then contracted. The contraction of net was directed toward the epithelium fragments. It is possibly that there is intimate interaction between coelomic epithelium and celomocytes in case of damage. The fragments of *Mytilus edulis* mantle were cultured with this medium at temperature 10 °C. The different cells migrated constantly, settled, attached to the surface, proliferated, and their amount was increased. Some of these cells moved into suspension. Such detached cells were placed in another plate, where they attached again and proliferated. The remained cells attached to surface were detached by ferment, and placed in another plate also. The procedures of cell passages were carried out several times during 22 monthes. These results confirm the cell viability. The formation of crystals which began to appear after some time of cultivation, may approve the functional condition of cells. All cells accumulated the cultivation during were freezed. The control defrosting aliquot of cells demonstrated their viability.