some of the currently held concepts regarding leukocyte mobilization need re-evaluation. G. J. Fruhman

Department of Anatomy, Albert Einstein College of Medicine, Yeshiva University, New York, April 11, 1959.

Zusammenfassung

Es gibt zahlreiche Berichte darüber, dass intraperitoneale Injektion von physiologischer Kochsalzlösung bei Säugetieren eine lokale Mobilisierung neutrophiler Leukocyten verursacht. Diese Reaktion bleibt bei Verwendung nicht-pyrogener NaCl-Lösung aus, tritt jedoch bei Zusatz von Bakterienextrakt zu dieser Lösung wieder auf. Zellzählungen ergeben ebenfalls eine erhöhte Zahl von mononukleären Leukocyten (Makrophagen und Lymphocyten) in der Peritonealflüssigkeit. Geringste Verunreinigungen der verwendeten Kochsalzlösungen dürften in zahlreichen früheren Untersuchungen zu falschen Schlussfolgerungen geführt haben, weshalb eine Reihe allgemein anerkannter Hypothesen über die Leukocytenmobilisierung neu zu bearbeiten wären.

Gastrulation in the Housefly, *Musca vicina*, Macquart

Among the muscids, the gastrular movements begin after the cytoplasmic layer ('innere blastemma') has become incorporated in the blastoderm and the delimitation of the blastoderm cells has been completed. In other insects also (where the 'innere blastemma' does not develop), gastrulation takes place after delimitation of the blastoderm cells. In the case of the housefly studied here, however, the gastrular invagination begins even before the cell furrows have fully developed and the blastoderm is still syncytial (Fig. 1). This feature in *M. vicina* would indicate that the morphogenetic forces responsible for gastrulation are not localised in the individual cells but are spread over the whole mid-ventral strip of the blastoderm. It may indeed be that the forces involved originate in the cortex of the egg, as shown in amphibian eggs (Holtfreter[1]).

Another noteworthy feature is that the 'innere blastemma' (whose incorporation in the blastoderm is responsible for the great thickness of the blastoderm seen in Figure 1) is rich in ribonucleic acid and glycogen, as demonstrated by histochemical techniques used along with the appropriate controls. The 'innere blastemma' also has basophil granules (probably derived from yolk globules) which become localised in the inner portion of the blastoderm after the incorporation of the former in the blastoderm. The outer portion of the blastoderm, however, is composed of the original egg cortex. This orientation is retained in the ectodermal cells but, in the mesoderm cells, the granule bearing areas begin to face outwards due to gastrulation (Figure 2).

Details of the morphological and histochemical study of the early embryology of the housefly would be published elsewhere.

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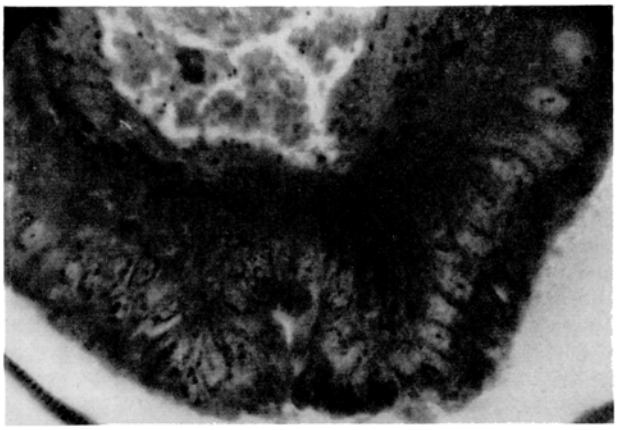
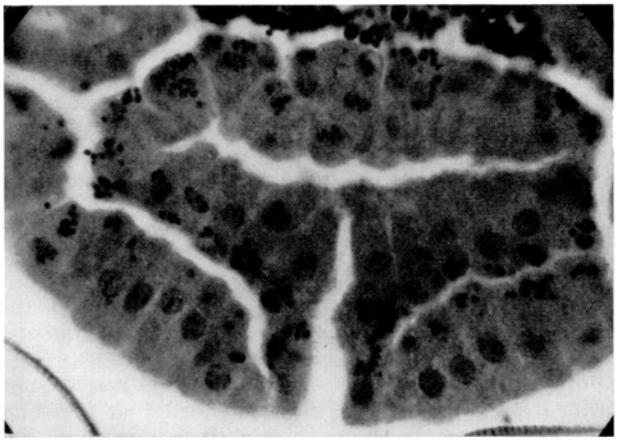
Department of Zoology, Dacca University, Dacca (Pakistan), January 8, 1959.

[1] J. Holtfreter, J. exp. Zool. *93*, 251 (1943).





20 μ

Fig. 1.—Transverse section of the egg showing the beginning of the gastrular invagination even though cell furrows have not fully developed.

Fig. 2.—Transverse section of the egg showing the cells of the ectoderm and the mesoderm tube. In the former, the granules are seen in the inner ends of the cell; in the latter, they are in the outer portions.

Résumé

L'«innere blastemma» de l'œuf de la mouche domestique est riche en acide ribonucléique et en glycogène. Ce stratum s'incorpore dans le blastoderme et le mouvement gastrulaire commence peu après, avant même que la délimitation des cellules soit complète. La signification de ce caractère est soulignée.

Etude immuno-électrophorétique de l'uromucoïde

On sait que l'urine normale renferme une mucoprotéine, dite *substance de* Tamm et Horsfall[1] ou *uromucoïde* (Boyce[2]), qui est réputée être particulièrement insoluble dans des solutions salines, même faibles.

Il nous a paru intéressant de vérifier, au moyen d'un antisérum spécifique, si une précipitation saline par le

[1] I. Tamm et F. L. Horsfall, J. exp. Med. *95*, 71 (1952).

[2] W. H. Boyce, F. K. Garvey et C. M. Norfleet, J. Urol. *72*, 1019 (1954).