

ADP-infusion ($EP_1:RP_1$) and subtracting it from 100, so: $A = 100(1 - EP_2/RP_2 \times RP_1/EP_1)$. Microscopical examination of the material on the filter, as well as blood smears and thrombocyte-counting before and behind the filter during ADP-infusion, showed that occlusion of the filter is almost exclusively caused by thrombocytes.

To induce thrombocyte aggregation, an isotonic ADP solution is infused before the filter at a rate of 0.1 ml/min for 30 sec. After completion of the ADP administration, the pressure behind the filter rapidly returns to its initial level, usually within a few minutes. This indicates a cleaning of the filter as a result of des-aggregation. The time between 2 consecutive measurements has been standardized at 10 min.

The degree of thrombocyte aggregation depends on the dose of ADP. Figure 3 shows the relationship between the ADP-dose and the aggregation-index after the first as well as the second measurement. Statistical examination showed that in all ADP-doses tested there were no significant differences between the first and second aggregation index, induced by the same dose of ADP in the same animal; this suggests that complete recovery of

platelet-response to ADP had occurred. By mixing an aggregation-inhibiting agent with the second dose of ADP, the inhibiting effect can therefore simply be calculated by subtracting the second from the first aggregation-index ($\Delta A = A_1 - A_2$). This was done with Prostaglandin E_1 (PGE_1), a very active aggregation-inhibitor in vitro as found by KLOEZE². At the first measurement 0.06 μ g ADP per 30 sec was infused, while in the second determination this amount of ADP was mixed with several doses of PGE. Figure 4 shows the relationship between the PGE_1 -dose and its aggregation-inhibiting action. In the doses tested, this relationship is rectilinear.

This 'filter-loop' technique is particularly suitable for testing aggregation inhibitors after injection anywhere in the body. In the first place, degree and duration of the inhibition can be determined, but also any effects on the blood pressure.

Zusammenfassung. Das Ausmass einer experimentell induzierten Thrombozytenaggregation im strömenden Blut wird kontinuierlich bestimmt durch Messung des Blutdrucks vor und hinter einem extrakorporal in den arteriellen Kreislauf der Ratte aufgenommenen Filter. Die Aggregation wird durch Infusion von Adenosindiphosphorsäure (ADP) vor dem Filter induziert. Die Aggregate schliessen das Filter teilweise ab, was zu Änderungen im Blutdruck vor und hinter dem Filter führt. Aus diesen Änderungen lässt sich das Mass der Aggregation ermitteln. Es wurde gefunden, dass dieses durch die ADP-Gabe bedingt wird.

G. HORNSTRA

Unilever Research Laboratory,
P.B. 114, Vlaardingen (The Netherlands),
10 September 1969.

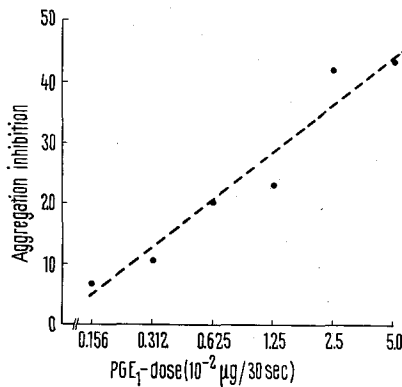


Fig. 4. Relation between PGE_1 -dose and aggregation inhibition (mean of 8 experiments per dose).

² J. KLOEZE, in *Prostaglandins* (Eds. S. BERGSTRÖM and B. SAMUELSON; Almquist and Wiksell, Stockholm 1967), p. 241.

ACTUALITAS

International Cell Research Organization (ICRO)

1. *Training Courses.* One of the main activities of ICRO is the organization of training courses on topics of high novelty and on modern techniques in cellular and molecular biology: Principles and techniques of tissue and organ culture; Genetics and Physiology of Bacterial viruses; Energy transducing systems on the sub-cellular level; Methods in mammalian cytogenetics; Membrane Biophysics; DNA-RNA Hybridization; Biogenesis of Mitochondria; Embryology and Epigenetics; Interaction between Animal Viruses and host cells, application of computers to experimental work in biology and chemistry; Methods in molecular biology, etc. The courses generally last 3-5 weeks, and include 16-20 young participants (sometimes more). The ICRO courses are fully inter-

national, both the teaching staff and the participants coming from the largest possible number of countries.

2. *The Problem of Developing Countries.* Most of the past ICRO courses have been organizing in European countries - east and west - but the demand from developing countries is increasing steadily. ICRO activities in developing countries may tend to give preference to topics of potential economic usefulness, such as applied microbiology, microbial protein production, fermentation industries, soil microbiology, plant genetics, etc.

Inquiries for more information should be addressed to: Dr. Adam Kepes, International Cell Research Organization, c/o Unesco - AVS, Place de Fontenoy, 75 Paris 7e, France.