

# 微核形成与细胞周期关系的初步研究II. 微核形成的放射性自显影和显微形态学研究

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**摘要** 本报告应用卜射线处理、PHA刺激,放射性自显影等方法研究了微核在人淋巴细胞各周期阶段形成的形态学证据。结果表明,经体外照射的人体外周血,在其间期淋巴细胞各阶段: G0G1, S和G2期,均可有微核形成,并观察到微核形成的中间过程,核变形,核物质膨出并延伸,中间连丝断裂或在细胞质中消失,与主核完全脱离后微核形成。在有丝分裂中,后期细胞也观察到无着丝点染色体断片和落后染色体,它们有可能形成微核。这样看来,细胞周期各阶段均可能形成微核。作者还观察到胞外微核的形成,并认为它的增多可能是一种病理现象。

**关键词**  
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## Preliminary Studies on the Relationship Between Micronucleus Fomnation and Cell Cycle II. Studies on Micronucleus Formation by Autoradiography and Microscopy

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### Abstract

<FONT face=Verdana> In this paper morphological evidence of micronucleus (MN) formation in various phases of cell cycle was investigated by y-irradiation, PHA-stimulation and autoradiography etc. The results show that in various phases of,interphase cell: G1o, G1, S and G2 phase MN induced by y-rays might be produced. Morphological process of MN formation: protrusion and prolongation of nuclear matter, break and disappearance of small thread between main nucleus and MN are observed. Acentric fragments of chromosome and late chromosomes in meta- and anaphase cells are also observed. Mitotic cells with chromosome aberration and might develop into micro--nucleated cells. Therefore, in various phases of cell cycle MN can be formed. Extracellular micronucleus (ECMN) is sometimes observed. Authers consider that appearance of ECMN may be pathological phenomenon.</FONT>

### Key words

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