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干扰素对正常骨髓粒巨噬细胞集落生长的抑制作用

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关键词 干扰素 α-2b; 骨髓粒巨噬集落形成单位

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干扰素(interferon,IFN)除有抗病毒功能外,还具有干扰多种正常或恶性细胞增殖的作用[1]。从70年代起,人们开始注意到无论是病毒感染或恶性肿瘤患者,用IFN治疗后均使外周血象受抑制[2]。本研究用半固体培养方法观察7种浓度的IFN对正常骨髓粒巨噬细胞体外生长的抑制作用。

1 材料和方法

1.1 标本来源

取自本院胸外科手术切除的肋骨15例,用咬骨钳挤出骨髓成分,按常规方法分离出单个核细胞。

1.2 干扰素 α-2b 制剂

美国先灵葆雅公司产品。

1.3 骨髓粒巨噬集落培养条件与方法

FCS30%,PHA-LCM10%,甲基纤维素0.9%,细胞终浓度2×10^5个/ml。实验组加入用1 640液稀释成的不同浓度的IFNα-2b,使之终浓度分别为10、40、100、200、400、1 000、4 000U/ml,对照组加等量的1 640液,培养10d后计算集落(≥40个细胞[3])和丛落数(3~39个细胞)。

1.4 集落细胞形态观察

用玻璃吸管吸出单个集落于玻片上,瑞氏染色,油镜下可见95%以上集落由粒系细胞组成,少数为其它细胞。

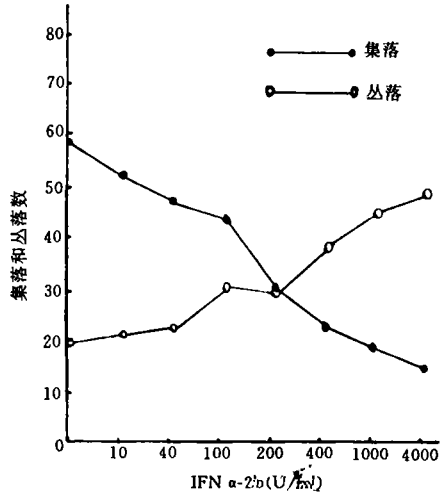
1.5 统计学方法

各实验组与对照组之间采用Dunnett t 检验。

2 结 果

7种浓度的IFN α-2b对15例正常骨髓粒巨噬细胞集落生长的影响,见附图。

从附图可见,当IFN α-2b浓度>100 U/ml时集落数明显减少($P<0.01$),且在100~4000 U/ml浓度范围内,IFN α-2b浓度越高,集落数减少越严重;IFN α-2b浓度为10~200 U/mnl时丛落数不减少,>400 U/ml时丛落数增加($P<0.01$)。



附图 各浓度IFN α-2b对骨髓粒巨噬细胞集落生长的影响

3 讨 论

本文研究了7种浓度的IFN α-2b对正常骨髓粒巨噬细胞集落生长的影响,从实验结果得出IFNα-2b浓度为100U/ml时已足以减少正常骨髓粒巨噬细胞的集落数,且随着IFN α-2b浓度升高,集落数减少越严重,这与Greenberg[4]、Hull[5]的结论一致。但这7种浓度的IFN α-2b并不阻碍正常骨髓粒巨噬细胞丛落生长,说明IFN α-2b主要是影响骨髓粒巨噬细胞的成熟,使之停留于丛落阶段,这与Verma[3]的结论一致。

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STUDY OF UNIVERSITY STUDENTS SEXUAL DEVELOPMENT AND SEXUAL BEHAVIOR

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One thousand and eight first and second year university students in Guangzhou area universities were investigated. The results showed as following: (1) There were significant diffrences between the first emission, second sex character of the males and the menophania, second character of the females ($P<0.05$). The psychology reaction of first emission of the males was curiosity and carreleness, and the psycholoty reaction of the females' menophania was negative emotion. (2) There were significat diffrences in the aspects of the onset ages of the admiring the opposite sex and first love between the males and the females ($P<0.05$). 16.57% of students experienced the love affairs before investigation. (3) The rates of masturbation of the males and the females were 30.14% and 7.6%, respectively. The rates of the kiss and enbrace of the total students were 12.9%. There were significant differences in all three aspects between the males and the females. (4) Some students underwent experinces of abnormal sex psycholoty.

Key words sex psycholoty; university students; emission; menophania; masturbation

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认识 IFN α-2b 对造血祖细胞的抑制作用，有助于指导 IFN 的正确使用，对原有造血功能不良者或应用剂量较大时，应警惕 IFN 对骨髓的抑制作用。

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