

Figueiredo P.M.¹、Furumura M.T.¹、Ribeiro D.²、de Paula E.²、○Yano T.¹

¹Estadual de Campinas大・生物学研・微生物免疫、²生化学

Some strains of enteropathogenic *Escherichia coli* produce a hemolysin known as Enterohemolysin (EHly) because its association with enteric diseases. EHly shows hemolytic activity towards washed erythrocytes from different animal species on blood agar plates. EHly activity has recently shown to be inhibited by normal serum lipoproteins and by cholesterol *in vitro* suggesting a simple leaflet insertion model for binding and neutralization of EHly by cholesterol in surface of lipoprotein, mainly high density lipoprotein (HDL). Probably the molecular mechanism of EHly activity is the same, a simple insertion in erythrocytes membranes similar to detergent hemolytic activity.

Our results showed that only liposomes with cholesterol inhibited the hemolytic activity of EHly on washed erythrocytes. The osmotic protectors did not inhibit the hemolytic activity of EHly and other lipids as phosphatidylcholine did not inhibit the EHly activity. Morphological analysis of erythrocytes incubated in the absence of EHly showed a majority of normal biconcave disc appearance cells, addition of EHly led to a wide variety of minor and major spiny protuberances.