ELECTRON MICROSCOPIC SCANNING PROFILE OF BALB/c MICE INTESTINAL VILLI AFTER PER ORAL LPS (LIPOPOLYSACCHARIDE) DURING PROBIOTIC INDUCTION

Abstrak:

Diarrhea is one of the most common diseases in children, the disease is generally caused by a toxin from bacterial enteropathogens (LPS). To overcome this has been attempted prevention by administering probiotics orally, but the effect of probiotics on the prevention of gastrointestinal disorders due to toxins from bacterial enteropathogens has not been clear. This study used experimental animals mice BALB/c, which consists of 3 groups, each group consisted of 4 mice. Group-1 weren’t given LPS-1 and probiotics, group-2 were given LPS on day 15, while the 3rd group were given the probiotic for 21 days and given LPS given on day 15. When compared to intestinal villi diameter between groups, showed a significant difference (p<0.05); groups-1 with group-2-3 showed a significant difference (p<0.05). Group-1 with group-3, showed a significant difference (p<0.05). Ultrastructure observation of small bowel mucosa using scanning electron microscopic (SEM), showed that image of the intestinal mucosa of group-1-2 is very different. Group-2 with group-3 is very different, but the picture of intestinal mucosal ultrastructure between group-1 with group-3 is almost the same. The conclusion, the gut mucosal surface ultrastructure in experimental animals that have been given probiotics and induced by LPS is similar to the intestinal mucosa of normal animals, while the diameter of villi growth intestine showed a significant difference. Diameter measurements to determine the growth of intestinal villi, it seems less sensitive, therefore it needs further research oriented molecular system that can be used as an indicator in the determination of intestinal mucosal repair.

Keyword:

bacterial enteropathogens, probiotics, intestinal mucosa, scanning electron microscopic

Daftar Pustaka:

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