

### PROBABLE PLASTIC DEGRADATION IN THE MOUSEDEER STOMACH

SIR: Generally one would dismiss the idea that ruminants such as the Lesser Mousedeer, (*Tragulus javanicus*) could degrade plastic in their stomach complex. However, whilst undertaking digesta transit studies in the mousedeer recently, cylinders of radio-opaque plastic markers were observed to slowly disintegrate. Two animals were given fifty, 1 x 2 mm lengths, of radio-opaque plastic administered by stomach tube into the distal oesophagus. Within 30 minutes, these had dispersed throughout the rumen and reticulum (Fig. 1). Twenty four hours later, these discrete markers at first glance appeared to have passed through the alimentary tract and to have been voided. Closer examination of the abdominal field showed that the markers remained but that few were entire and most were stretched and broken (Fig. 2). After another 4-5 days, the markers had disappeared and a radio-opaque 'dust' appeared in the ventral reticulum (Fig. 3). In this radiograph, the bright radio-opaque material lying dorsal to the 'dust' is a collection of solid, metallic, radio-opaque pellets used following the earlier failure of the plastic markers. This circumstantial observation of what appears to be the degradation of plastic within the rumino-reticular complex of the mousedeer warrants further investigation.

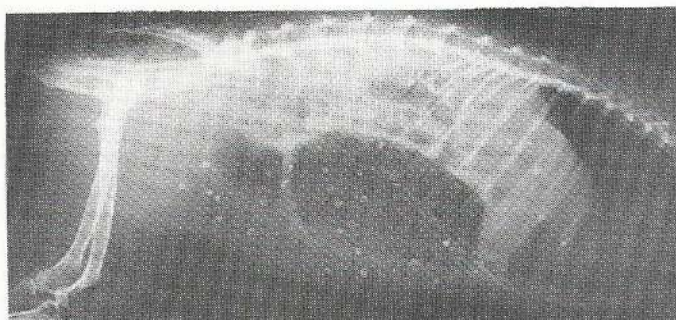


FIG. 1: Radiograph of the mousedeer abdomen showing the passage of radio-opaque plastic markers 30 minutes after administration

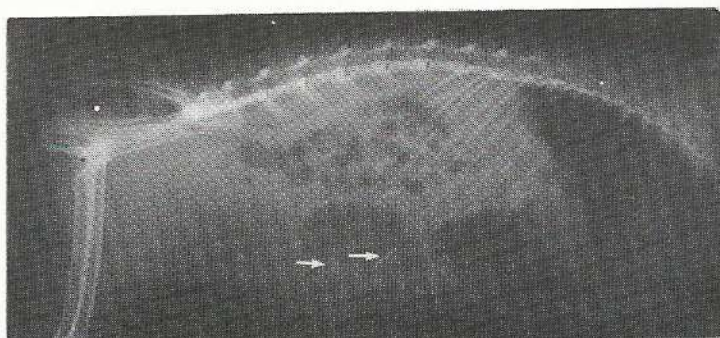


FIG. 2: Radiograph of the abdomen showing the passage and degradation of plastic markers 24 hours after administration

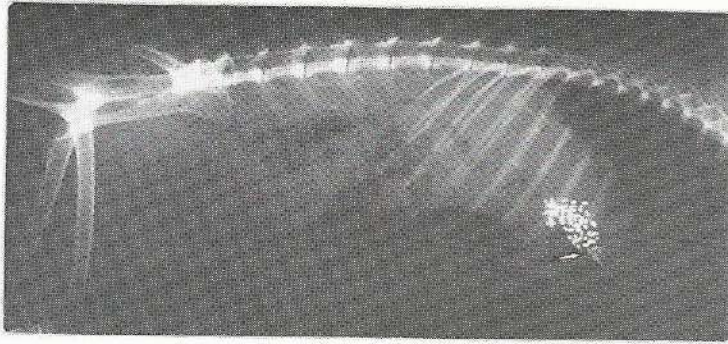


FIG. 3: Radiograph of the abdomen showing the passage and degradation of plastic markers 96–120 hours after administration

RICHARDSON, K.C.<sup>1</sup> and VIDYADARAN, M.K.  
*Faculty of Veterinary Medicine and Animal Science,  
Universiti Pertanian Malaysia,  
43400 Serdang, Selangor, Malaysia.*

<sup>1</sup> *Present address:*

*School of Veterinary Studies,  
Murdoch University,  
Murdoch, Western Australia, 6150 Australia.*