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What's your diagnosis?

Debilitation and Cachexia in a Bonnet Macaque (*Macaca radiata*)

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Animal care technicians at our facility noticed a group-housed, male, 11-year-old bonnet macaque (*Macaca radiata*) that appeared thin. The animal had a thin coat, and would often sit on the floor of the cage instead of on the shelves like the other monkeys in its group. The animal had lived in our in-house colony since birth, had always been group-housed, and had no history of illness or injury.

We examined the monkey. It had loose skin associated with poor skin turgor but did not appear dehydrated. It was bright and alert. We weighed the animal and compared its present weight with a previous weighing from three months earlier; the monkey had dropped from sixteen pounds to eleven pounds. We singly housed the monkey for observation.

In the single cage, the monkey initially appeared to improve. It had a good appetite and, in addition to its regular daily monkey chow, it ate treats and fresh fruit provided as supportive care. During this time, we noticed the monkey had loose stools. We considered that the fresh fruit could be the cause, as no other animal in the group cage had diarrhea, sug-

gesting that infection was not to blame. We removed the fruit and gave the monkey Nutrical (a multi-vitamin molasses-based paste) daily. We continued the observation and Nutrical supplementation for a week. The loose stools neither improved nor worsened, the animal's behavior did not change, and there was no increase in body weight.

The animal had become suddenly weak even though it was still eating. We decided to collect blood for hematology and biochemistry and take abdominal radiographs the next day. The next day the animal still appeared weak, but took its Nutrical during morning rounds. One hour after morning rounds finished, before we took blood and abdominal radiographs, the animal technicians found the animal dead.

We performed a necropsy. When we opened the abdomen, we noticed a firm, enlarged, and mottled red liver and distended gall bladder (Figs. 1 and 2). There was increased vascularity and increased lymph node prominence to the colon and cecum, and the cecocolic junction felt thickened. We noticed some peripheral heart fluid, but the heart appeared normal. The other abdominal and thoracic organs and the brain appeared grossly normal. We took tissue samples for routine histopathology, and blood for Old World Monkey-specific viral analysis.

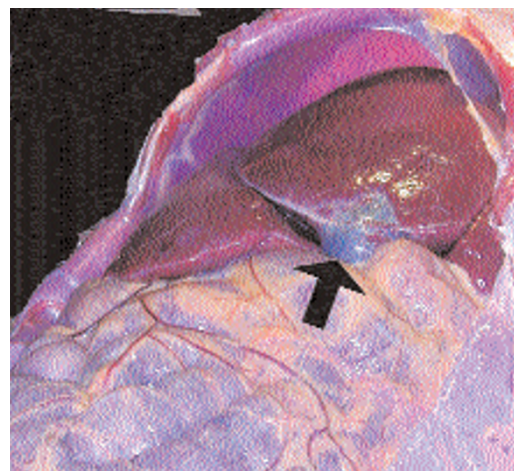


FIGURE 1. Liver of a group-housed, male, 11-year-old bonnet macaque. The liver is enlarged and firm and the gall bladder (arrow) is distended.

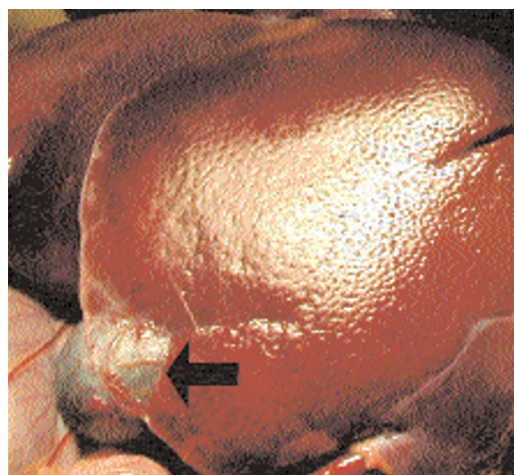


FIGURE 2. Same liver as Fig. 1. Under direct lighting, small red to tan patches and spots mark the surface of the enlarged liver. The gall bladder is distended (arrow).

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