

**MULTIPLE ORGANS FAILURE IN AGED CHIMPANZE**

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**History**

Female **Chimpanze** from a local Zoo was submitted to laboratory of Veterinary Pathology **IPB Bogor** for necropsy on 11 June 2008. She was **67** years old . Before died she had complain of weakness, not able to stand, and only consumed fruit juices.

**Pathology Findings**

The result of pathology findings are summing up into table 1 .

Table 1. The summing up of pathology findings in 64 years old, female chimpanze

| Organs                   | Long standing lesion   | Lesion that still have acute stages  |
|--------------------------|--|--|
| Heart                    | Bilateral ventricular dilatation, <b>mitral</b> valves <b>endocardiosis</b>  | <b>Multifoci</b> of chronic active myocardial necrosis                             |
| <b>Blood</b> vessels     | Atherosclerosis of <b>thoracal</b> and abdominal aorta, pulmonary and coronary arteries, <b>obturating thrombi</b> |  |
| Spleen                   | Chronic multinodular mineralized splenitis   |  |
| Pleural cavity           | ≥ 300 ml of <b>clear</b> fluid pleural effusion, pleural adhesion tags   |  |
| Lungs                    | Long standing <b>anthracosis</b> , chronic bronchopneumonia  |  |
| Digestive tract          | Broken left canine teeth and several of incision teeth were absent   | Ulcerative gingivitis, <b>muco</b> hemorrhagic gastro-enteritis, catarrhal colitis |
| <b>Liver</b>             | Chronic hepatitis  |  |
| Pancreas                 | Chronic pancreatltis   |  |
| Kidneys                  | Chronic interstitial nephritis, right sided atrophy  |  |
| Reproductive organs      | Chronic endometritis   |  |
| Brain                    | Chronic focal meningitis   |  |
| Skin and mucous membrane | Healed wound on the back, few region of non symmetrical alopecia   | <b>Inner</b> lips and conjunctiva: blanch  |

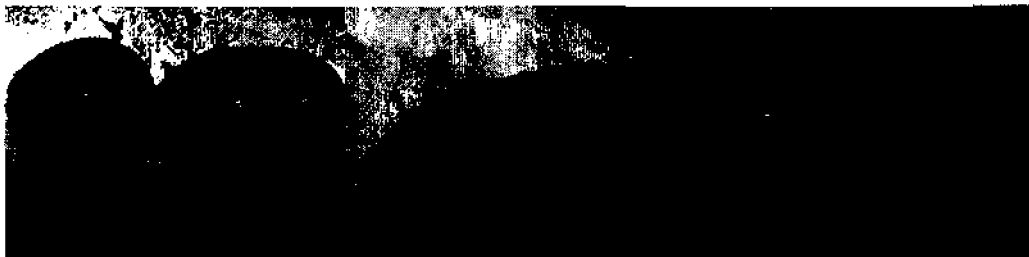


Figure 1. Pathological lesions in several organs : A. right sided atrophy of kidney, B. Chronic multinodular mineralized splenitis C. Atherosclerosis

### Histopathological findings

Histopathology of the heart were multifocal fibrosis around main blood vessel, accumulation of lipofuchsin pigment in myofibril, mild inflammatory reaction dominated by lymphocyte. A da shown thrombus, vasculitis, leakage of tunica intima, lymphocitic infiltration and fibrinoid degeneration. Microscopic changes of spleen shown capsula and trabecula structure were intact, while the structure of lymphoid follicles were missing replaced by various size of lamellated protein deposition as hyaline and bright pink with HE staining. Others histopatgological findings were describe aging response.

### Discussion

The myocardial necrosis is partly due to ischemia that set up by deprivation of blood in the atherosclerotic coronary artery. The resultant cardiomyopathy, joint by endocardiosis have lead bilateral cardiac dilatation. The obturating

thrombi in the atherosclerotic large arteries, chronic bronchopneumonia and pleural effusion contribute to tissue deprivation of oxygenated blood. The tissue hypoxia, in concert with chronically diseased mayor organs, confinement stress and self food restriction are causative factors to multiple organ failure

### Acknowledgement

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### References

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