Research Note: Cost-Benefit Analysis of Magnetic Resonance Imaging (MRI) in Animal Hospital - Case Study of National Taiwan University Veterinary Hospital

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ABSTRACT The purpose of this study was to evaluate the usage, cost, and benefits of Magnetic Resonance Imaging (MRI) in National Taiwan University Veterinary Hospital. We performed a SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis to analyze the financial and non-financial advantages and disadvantages from a hospital management perspective. Data were obtained from the period of November of 2007 to November of 2009. During this period of time, a total of 179 pet animals were examined with average 7.2 animals per month and there was a gradually increased utilization rate. In 2008, the average monthly income generated from MRI examination was 46,499 NT dollars which increased to 102,090 dollars in 2009. As for advantages, MRI possesses higher distinguishing capabilities among the soft tissues of the brain and viscera as well as a better diagnostic ability for nervous system diseases. It also reduces the risk of radiation. Furthermore, MRI operation not only enhances hospital reputation, but also improves the quality of medical treatment. As for disadvantages, the revenue generated from MRI operation does not offset the high cost of purchasing the equipment. Also, since there is no insurance system among pet medicine markets in Taiwan, the high charge of MRI examination may reduce owners’ willingness to subject their pets to this type of examination. This will lead to difficulties in balancing financial expenditures. However, it should not be forgotten that the ultimate goal of using MRI in this teaching hospital will stimulate the advances and elevation of teaching and researching perspectives. [Chou CH, Chang YP, Pang VF, Huang HP, Lee JJ, * Huang FF. Cost-Benefit Analysis of Magnetic Resonance Imaging (MRI) in Animal Hospital - Case Study of National Taiwan University Veterinary Hospital. Taiwan Vet J 36 (3): 255-260, 2010. * Corresponding author TEL: 886-2-3366-9735, FAX: 886-2-2364-9154, E-mail: fl005@mail.oit.edu.tw]

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