

## Abstract

**BACKGROUND:** A study to curb transmission cycle of a zoonotic *Taenia cestodiasis* between humans and cattle is presented. **OBJECTIVE:** To evaluate the reliability of meat inspection procedure in detecting carcasses of cattle with *T. saginata* cysticercosis. **METHODS:** A total of 55 cattle divided into two groups of artificially (n=30) and naturally (n= 25) infested animals were utilized. Total dissection method was used as a gold standard of validity. **RESULTS:** Meat inspection insensitively revealed cysticerci in 12 carcasses in each group compared with 24 and 23 carcasses revealed by total dissection in natural and artificial infestations, respectively. Sites of oncosphere invasion showed great variations with the two groups of cattle. In the predilection sites, most cysticerci were found in the heart, *Triceps brachii*, tongue and head muscles in that order. However, non-predilection sites (neck and back, hind limbs, chest, pelvic and lumbar regions, lungs and liver) considerably harboured high numbers of cysticerci. Observations indicated that except for the dead, degenerate or calcified cysticerci a careless meat inspector will most likely miss out quite a number of viable cysticerci, which blend the pinkish-red colour of the meat and be passed on for human consumption, becoming the source of bovine cysticercosis. **CONCLUSIONS:** The results confirmed that in spite of the time and efforts taken by meat inspectors looking for cysticerci at specified predilection sites of carcasses, this method is insensitive and inaccurate. To effectively improve meat inspection procedures, there is need to increase the area and number of predilection sites observed during inspection and vary them according to the nature of the animals, their husbandry history and the target human population for consumption. In addition, other control approaches such as vaccination, chemotherapy and immunodiagnosis should be developed and implemented to complement meat inspection procedures.