Results: All of the three different 5 Nitroimidazole derivatives commercial drugs were able to reduce 5% of the viable trophozoites after 24 hours with metronidazole at 0.78–1.56 μg/ml; while two different ornidazole at 6.25 μg/ml concentrations. In the essential oils, only Origanum vulgare subsp.hirtum was able to reduce 50% of the viable trophozoites in first 24 hours. There was over all little difference in the reduction of %90 of the viable trophozoites between ornidazoles which is 12.5 μg/ml and 12.5–25 μg/ml respectively though the %90 reduction of trophozoite viability was at 25 μg/ml for metronidazole. Essential oils reduced %90 of the viable cells at concentrations between 50–100 μg/ml. After 24 hours complete inhibition of viability (EC100) was at 25 μg/ml for ornidazole while it was higher for metronidazole and ornidazole. Origanum vulgare subsp.hirtum essential oil inhibited the trophozoites totally at 50 μg/ml; while the total inhibition of growth by tea oil was given after 48 hours at 100 μg/ml. Carvacrol%100 inhibitory concentration was >100 μg/ml.

Conclusion: These data suggest that Origanum vulgare subsp.hirtum oil may be a good candidate for treating trichomoniass and that further investigation of this drug is warranted.

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Type: Poster Presentation

Liver parasites of cattle slaughtered in Onitsha urban and environ, Southeast Nigeria

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Background: The rate of infection and the extent of damage of liver by parasites in cattle slaughtered in Onitsha and environ south east Nigeria were investigated from October to December, 2014. The question then was which parasites were involved and was there any economic loss as a result of the parasitic infections.

Methods & Materials: The study involved postmortem inspection on the slaughtered cattle. The livers were examined by making length wise incision on the ventral side, in such a way as to open up the gall bladder and the bile duct. Macroscopic changes in the liver were observed and their economic importance noted.

Results: Out of a total of 2010 cattle examined 273(13.6%) were infected. Infection rates were 14.2, 13.6, and 13.2%, for the months of October, November and December respectively. Two types of flukes, Fasciola gigantica(12.0%) and Dicrocoelium hospes(1.1%) were identified along with hydatid cysts(0.5%). There were mixed infections of F. gigantica and D. hospes and also of F. gigantica and hydatid cysts. Infected liver showed thickening of the bile ducts and cirrhosis. In very heavy infections, the bile turned dark-green and more viscous than normal light green colour. The total weight of livers condemned by parasitic infection during the period was 675.7kg. Condemned liver due to F. gigantica was 524.5kg and that due to D. hospes was 133.7kg. A kilogram of liver was sold at $8, thus the total amount lost due to liver condemnation was $5,405.6.

Conclusion: The parasites found contributed to a remarkable economic loss due to liver condemnation. The nomadic management practiced by cattle rearers in Nigeria could aid infection. Very poor meat inspection facilities and uncooperative attitude of butchers were observed. Prompt chemotherapy of live animals is necessary. Restricting feeding of the treated animals with hays before they are slaughtered is recommended.

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