Faculty of Veterinary Medicine
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Methicillin -resistant *Staphylococcus aureus* (MRSA) in some meat products

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7. SUMMARY

One hundred samples of burger, luncheon , pastrami and sausage (25 of each) collected from supermarkets, groceries and local markets in Alexandria City, Egypt. The samples obtained as sold to the public and transferred with a minimum of delay to the laboratory to be examined.

The results can be summarized as follows:

7.1. Prevalence of Staphylococcus spp. in examined meat products samples

- Prevalence of Staphylococcus spp. was 28% (7/25), 12% (3/25) ,28% (7/25) and 48% (12/25) in examined burger , luncheon , pasterami and sausage samples respectively , with overall prevalence 29 % (29/100).

7.2. Prevalence of *Staphylococcus aureus* in examined meat products samples

- Prevalence of *Staphylococcus aureus* was 28% (7/25), 8% (2/25) ,8% (2/25) and 24% (6/25) in examined burger , luncheon ,pasterami and sausage samples, respectively, with overall prevalence 17 % (17/100) all isolated strains were confirmed by molecular technique (PCR) as all strains were positive for *nuc* gene .

7.3. Prevalence of methicilline-resistant *Staphylococcus aureus* (MRSA) in examined meat products samples

- Prevalence of MRSA confirmed by identification of *mec A gene* by genotyping identification (PCR) was 20% (5/25), 8% (2/25), 8% (2/25) and 12% (3/25), in examined Burger , Luncheon , Pasterami and Sausage samples, respectively, with overall prevalence 12 % (12/100).
- All MRSA isolates were resistant to three or more antibiotic which identified by vitek 2 compact system.

7.4. Prevalence of coagulase negative staphylococcus spp. (CNS) in examined meat products samples.

- Prevalence of coagulase negative staphylococcus spp. based on vitek 2 compact system. The coagulase negative staphylococcus spp was not detected in all

examined Burger samples, results of Luncheon samples were 4% (1/25) as *S. saprophyticus*, results of Pasterami samples were 8% (2/25), 4% (1/25) and 8% (2/25) as *S. saprophyticus , S.equorum and S.xylosus* respectively and the results of Sausage samples were 8% (2/25), 8% (2/25), 4% (1/25) , and 4%(1/25) for *S. sciuri, S. hominis spp hominis , S. warneri ,* and *S. lugdunenesis* ,respectively.With ovel all prevalence of CNS 12% (12/100).