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## LIST OF ABBREVIATION

<i>Past. multocida</i>	: <i>Pasteurella multocida</i>
<i>Bord. bronchiseptica</i>	: <i>Bordetella bronchiseptica</i>
<i>Staph. aureus</i>	: <i>Staphylococcus aureus</i>
<i>E. coli</i>	: <i>Escherichia coli</i>
<i>Strept. pneumoniae</i>	: <i>Streptococcus pneumoniae</i>
<i>Strept. viridans</i>	: <i>Streptococcus viridans</i>

## 7. SUMMARY

Respiratory infections in rabbits are considered to be serious problem leading to severe losses in infected herd, so this study was designed to explore their actual causative bacterial and fungal agents and check the sensitivity of some bacterial isolates as *Past. multocida*, *Bord. bronchiseptica*, *Staph. aureus*, *E. coli* and *Strept. pneumoniae* to some chemotherapeutic agents. The study was conducted on 250 samples which were randomly collected from both apparently normal and diseased rabbits in different localities in Kafr El-Sheikh Governorate. The bacteriological investigation of the collected samples revealed that 238 rabbits proved to be infected with incidence of (95.2%). While mycological investigation revealed that 93 rabbit infected with incidence of (37.2%). The bacteriological identification of the obtained bacterial isolates showed that 107 isolates were *Past. multocida* (42.8%), 74 isolates were *Bord. bronchiseptica* (29.6%), 57 isolates were *Staph. aureus* (22.8%), 33 isolates were *E. coli* (13.2%), 14 isolates were *Pseudomonas aeruginosa* (5.6%) 12 isolates were streptococci (4.8) [8 isolates were *Strept. pneumoniae* (3.2%) and 4 isolates were *Strept. viridans* (1.6%)], 9 isolates were Anthracoid (3.6%), 8 isolates were *Proteus mirabilis* (3.2%).

While the mycological causative agents were 97 isolates (38.8%) which were recognized into the following, 22 isolates were Aspergillus species (8.8%) (10 *A. Niger*, 7 *A. fumigatus*, 1 *A. flavus*, 4 *A. terreus*), 20 isolates were penicillium species with incidence (8%), 9 isolates of genus *Epicoccum* (3.6%), 6 isolates of genus *curvularia* (2.4%), 11 isolates of *Fonsecaea compacta* (4.4%), 7 isolates of *Fonsecoea pedrosoi* (2.8%), 2 isolates of genus *paecilomyces* (0.8%), 7 isolates of genus *Mucor* (2.8%), 13 isolates of yeast (8 isolates of *Torulopsis glabrata* (3.2%) and 5 isolates of genus *Rhodotorula* (2%).



## Summary

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*Past. multocida* isolates were tested to check their antibiotic sensitivity testing and revealed that all isolates were completely sensitive to Gentamycin (100%) and highly sensitive to sulphamethaxazole + trimethoprin (84.1%), while they were less sensitive to neomycin, ampicillin, kanamycin with an activity percentage of 48.6%, 44.9%, 43.9%, respectively. On the other hand, the isolates were lower sensitive to chloramphenicol, nitrofurantion, tobramycin, amikacin and ceftriaxone with an activity percentage of 8.4%, 8.4%, 6.5%, 6.5% and 3.7%, respectively.

While *Bord. bronchiseptica* sensitivity testing revealed that the isolates were highly sensitive to amikacin, sulphamethaxazole + trimethoprin and neomycin with an activity percentage of 87.8%, 85.1% and 83.8%, respectively, moderately sensitive to gentamycin, kanamycin, chloramphenicol and tobramycin with an activity percentage of 78.4%, 77%, 75.7%, 62.2%, respectively, while less sensitive to nitrofurantion, and ampicillin with an activity percentage of with an activity of 50%, 50% for each one and were lower sensitive to ceftraiaxone with an activity (24.3%).

On the other hand, sensitivity testing of *Staph. aureus* revealed that, the isolates were highly sensitive to gentamycin, chloramphenicol, ampicillin, amikacin, nitrofurantion and kanamycin with an activity percentage of 93%, 87.7%, 86%, 86%, 80.7% and 80.7%, respectively. While the isolates were moderately sensitive to neomycin, (68.4%). On the other hand, the isolates were less sensitive to ceftriaxone and tobramycin with an activity percentage of (57.9%) and 43.9%, respectively, but were lower sensitive to sulphamethaxazole + trimehoprin with an activity percentage of (21.1%).

## Summary

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With regard to the *E. coli*, the antibiotic sensitivity testing revealed that the isolates were highly sensitive to gentamycin 87.9%, moderately sensitive to nitrofurantion, ceftriaxone with an activity percentage of 69.7% for each one, while less sensitive to neomycin, kanamycin, amikacin, tobramycin and chloramphenicol with an activity percentage of 57.6%, 54.5%, 54.5% 51.5%, and 45.5%, respectively and were lower sensitive to both ampicillin and sulphamethaxazole + thrimethoprim with an activity percentage of (36.4% and 33.3%), respectively.

But antibiotic sensitivity testing of *Strept. pneumonia* revealed that the isolate were completely sensitive to gentamycin (100%), but highly sensitive to ampicillin, kanamycin and chloramphenicol with an activity percentage of 87.5%, 87.5%, 75%, respectively, moderately sensitive to neomycin, 62.5%. On the other hand, the isolates were less sensitive to nitrofurantion, and tobramycin with an activity percentage of 50% for each one and were lower sensitive to amikacin, sulfamethaxazole + trimethoprim and ceftriaxone with an activity percentage of 37.5%, 37.5%, and 25%, respectively.

Also, it was observed that, antibiotic from Penicillin group produce a mortality rate between 0-100%, in particular ampicillin exhibits high toxicity 40-80%. This toxic effect of the antibiotics causing destruction of the normal flora of intestine, so rapid multiplication of a toxic-producing clostridium spiroforme inducing enterotoxaemia.