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ABSTRACT

Twelve isolates of *Pseudomonas aeruginosa*, *Klebsiella pneumoniae* and *Proteus mirabilis* were tested against chlorhexidine and sodium hypochlorite. Bacterial suspension was added to different concentrations of disinfectant, after (5,15,30,45) minutes samples were taken and cultured on nutrient agar, the effect of disinfectants were recorded at the time periods tested. The study showed that chlorhexidine is more active than sodium hypochlorite, where concentrations of (3 %, 2 %, 1.5%) of chlorhexidine showed an absolute activity (100%) on all isolates after (5) minutes of treatment, while only (3%) concentration of sodium hypochlorite showed that activity during the same time. The study found that the effect of disinfectant increases with the increase of concentration and treatment time. The study also indicated that *Ps.aeruginosa* isolates were more resistant to disinfectant in comparison with the other two species, while *Pr.mirabilis* isolates were more sensitive to them.

Klebsiella pneumoniae , *Pseudomonas*

(12)

Proteus mirabilis, *aeruginosa*

(45, 30 , 15 , 5)

(%1.5 ,

(%100)

%2 , %3)

(%3)

(5)

....

Ps.aeruginosa

Pr.mirabilis

(NaOCl) Sodium Hypochlorite

(Hibitane

) Chlorhexidine

. (2,1)

Chlorine Compounds

Hypochlorous Acid

. (4,3)

Biguanides

. (5,3)

. (7,6)

Proteus

Klebsiella pneumoniae

Pseudomonas aeruginosa

mirabilis

Pr.mirabilis

K. pneumoniae

Ps.aeruginosa

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(3)	(30)	(%50)	(%75)	(%83.3)
(45)				
(%0.25)	(%0.5)		(%91.7)	
(%0.03)	(%0.06)	(%0.125)		
	(4)	(%8.3)	(%25)	(%75)
				<i>Ps.aeruginosa</i>
(%100)		<i>Pr.mirabilis</i>	<i>K.pneumoniae</i>	
(45)	(%1 , %1.5 , %2 , %3)			
	<i>Pr.mirabilis</i>	(4)		
(%100)				
(2)	(15)	(%0.25,%0.5,%1,%1.5, %2 , %3)		

() ()

(1)

(5)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	%3	
0	0	0	0	0	25	75	100	100	100	<i>Pseudomonas aeruginosa</i>
0	0	0	0	50	50	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	25	75	100	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	8.3	41.7	58.3	91.7	100	100	100	

(2)

(15)

0.015 %	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	%3	
0	0	0	0	0	50	75	100	100	100	<i>Pseudomonas aeruginosa</i>
0	0	0	25	50	75	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	25	100	100	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	16.7	50	75	91.7	100	100	100	

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(3)

(30)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	% 3	
0	0	0	25	50	50	100	100	100	100	<i>Pseudomonas aeruginosa</i>
0	0	0	50	75	100	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	75	100	100	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	50	75	83.3	100	100	100	100	

(4)

(45)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	% 3	
0	0	0	25	75	75	100	100	100	100	<i>Pseudomonas aeruginosa</i>
0	0	25	100	100	100	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	25	50	100	100	100	100	100	100	100	<i>Proteus mirabilis</i>
0	8.3	25	75	91.7	91.7	100	100	100	100	

(%3)
(%1) (%1.5) (%2) (5)
(5) (%58.3) (%66.7) (%83.3)
(%83.3) (%91.7)
(15) (%1) (%1.5) (%2) (%75)
(6) %50
(%100) (30)
(%91.7) (%1) (%1.5) (%2)
(%0.5) (%83.3)
(8) (7) %58.3 (30)
(%100) (%0.5) (%1) (%1.5)
(45) (%75) (%91.7)
(%50)
Ps.aeruginosa
(45) (%1.5) (%2) (%3) (%100)
(%100)
(8) (%0.5 ,%1 ,%1.5 ,%2 ,%3)
(%1 ,%1.5 , (%100) *Pr.mirabilis*
(5) (5) %2 ,%3)

Ps.aeruginosa

Pr.mirabilis *K.pneumoniae*

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. (13,6)

Ps.aeruginosa

. (15,14)

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(5)

(5)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	%3	
0	0	0	0	0	0	25	25	50	100	<i>Pseudomonas aeruginosa</i>
0	0	0	0	0	25	50	75	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	0	25	75	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	0	8.3	33.3	58.3	66.7	83.3	100	

(6)

(15)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	%3	
0	0	0	0	0	0	50	50	75	100	<i>Pseudomonas aeruginosa</i>
0	0	0	0	0	50	75	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	0	50	75	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	0	16.7	41.7	75	83.3	91.7	100	

....

(7)

(30)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	% 3	
0	0	0	0	0	25	50	75	100	100	<i>Pseudomonas aeruginosa</i>
0	0	0	0	25	75	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	0	25	50	75	100	100	100	100	<i>Proteus mirabilis</i>
0	0	0	8.3	25	58.3	83.3	91.7	100	100	

(8)

(45)

%0.015	%0.03	%0.06	%0.125	%0.25	%0.5	%1	%1.5	%2	% 3	
0	0	0	0	0	25	75	100	100	100	<i>Pseudomonas aeruginosa</i>
0	0	0	25	50	100	100	100	100	100	<i>Klebsiella pneumoniae</i>
0	0	25	50	75	100	100	100	100	100	<i>Proteus mirabilis</i>
0	0	8.3	25	41.7	75	91.7	100	100	100	

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