



(ASOM)

Acute (50)
 5- 1) Suppurative Otitis Media (ASOM)
 .2007 2006 ()
 %49.23 *Staphylococcus aureus*
Proteus vulgaris % . *Candida albicans*
 B-haemolytic streptococci % . *Pseudomonas aeruginosae* % .
clocae Staph. epidermidis Haemophilous influenzae Pneumoniae Klebsiella
 .% . *Moraxella catarrhalis Enterobacter*
 % %
 %96.87 Amikacin Vancomycin *Staph. aureus*
 % Ciprofloxac % . Tobromycin % 78.12
Proteus vulgaris . % . Lincomycin
 Amikacin % Tobromycin % Vancomycin
 Tetracyclin % Ciprofloxac
Pseudomonas aeruginosa .%
 Tetracyclin % Amikacin Vancomycin
 Tobromycin % . Ciprofloxac
 Amikacin % .
Staph. aureus (Tetracyclin Ciprofloxac Tobromycin)
 Tobromycin % . Amikacin
Staph. aureus (Tetracyclin Ciprofloxac Amikacin)
 Amikacin % . Tobromycin
Proteus vulgaris (Tetracyclin Ciprofloxac Tobromycin)
 Amikacin) Tobromycin % . Amikacin
Proteus vulgaris (Tetracyclin Ciprofloxac
Candida albicans .Tobromycin
 Miconazole . (. .) Nystatin
 (. .) Ketoconazole (. .)

Griseofulvin (. .) Fluconazole
 . ()

ISOLATION AND IDENTIFICATION SOME THE PATHOGENIC AGENTS FROM ACUTE SUPPURATIVE OTITIS MEDIA (ASOM) IN CHILDREN IN AL-DIWANIYA CITY AND THEIR SENSITIVITY TEST AGAINST SOE OF ANTIBIOTICS IN VITRO

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Apstract

The present study entalid collection of (50) ear swabs from children patients suffering from Acute suppurative Otitis Media (ASOM) carried at the E.N.T section of the teaching hospital in AL-Diwaniya a City. Whose ages ranged between (1 day-5 years) during the Period from October 2006 until Jun 2007. The aim of these study is to isolate dominant pathogenic causes and responsible of (ASOM) in Children and effect of some antibiotics on this causes. *Staphylococcus aureus* bacteria was the dominant cause of Acute suppurative otitis media with the percentage of 49. 23%. Followed by *Candida albicans* with the percentage of 30.76%, *Proteus vulgaris* 6.15%, *Pseudomonas aeruginosa* 4.61 B-haemolytic streptococci, *Klebsiella Pneumoniae* Haemophilous influeenzae, *Staphylococcus epidermidis*, *Enterobacter clocase*, *Moraxella catarrhalis* with percentage 1.53% Results showed that 80% of the infection cases were caused by one pathogenic factor and 20% of them but more than one factor. The sensitivity test showed that *staph. aureus* bacteria had the highest Sensitivity to vancomycin 96.87%, Amikacin 78.12%, Tobromycin 68.74% and ciprofloxacin 65%, While showed lowest sensitivity to Lincomycin 3.12% while *Proyeus vulgaris* showed highest sensitivity to vancomycin 100%, Trobromycin 75%, Amikacin and ciprofloxacin with other antibiotic 50% and showed lowest sensitivity to Tetracyclin with other antibiotics 25%. *Pseudomonas aeruginosa* bacteria showed highest sensitivity to vancomycin and Amikacin 100%. Tetracyclin and ciprofloxacin with other antibiotics 66.66% while showed lowest sensitivity to Tobramycin and other antibiotics 33.33%. the results of synergistic antibiotics effect on *Staph aureus* showed the effect between Amikacin with (Tobramycin, ciprofloxacin and tetracycline) had a parentage of 90.47% whilethe synergistic, effect between Tobromycin and (Amikacin , ciprofloxacin and Tetracycline) had a percentage of 42.85%. While synergistic effect on *Proteus vulgaris* showed the effect between Amikacin with (Tobromycin, ciprofloxacin and Tetracycline) had percentage of 50%. While synergistic effect between Tobromycin and (Amikacin, ciprofloxacin and Tetracycline) had a percentage of 66.66%. The results showed that *Candida albicans* isolates had the highest sensitivity to Nystatin with inhibition zone rate (10, 11.8, 18.76) mm, Miconazole (0, 8, 15.3) mm, ketoconazole (10, 9.6,14.94) mm, Fluconazole (0, 9.6, 12.6) mm, Griseofulvin (0, 0, 6) mm.

[]
 [4] Behrman
 Himedia MacCkoney agar
 Blood agar (India) Laboratories
 (England) Mast Collee .[5]
 -18 ° 37 []
 24
 ()
 [6] Mattila and Joki
 .[16 15 14 13 12 11]
 [6] Ereshewtz
 Ciprofloxacin (England) Oxoid .[7]
 Cifixime ()
 Amikacin Cefotaxime Ceftazidime () (2)
 Staph. .Bioanalyse (France) . [8]
 aureus [6] Mattila and Joki
 .[17] (-)
 .[18]
 (Candida)
 [19] Bauer (Opporutunistic Pathogens)
 -: .[9]
 Nutrient agar

Materials and Methods

() (50)
 -)
 (Micropipete) (5
 2007 2006
 .[10] Indudharan
 %70

العدد الكلي للعزلات المشخصة = ٦٥ عزلة

Staph.aureus

%49.23

[23]

Staph.aureus

(CBCPAB)

Candida Bromo-cresol Purple Agar Base

Sabouroud (SDA)

dextrose agar

[24]

52

[25]

[20]

%

Candida albicans [27 26]

[21]

[28] %

%78.08

Micon- Fluconazole Ketaconazole Nystatin

Griseofulvin zole

Proteus vulgaris

[25] %

[29] Gupte %6.9

[22]

[30]

Elastase Alkaline Protease

Serine Protease

Results and Discussion

(20)

(45)

(50)

Candida albicans

%

P.aeruginosa

[25]

%

Klebsiella streptococc B-haemolytici
Haemophilous influenzae pneumoniae
Enterobacter epidermidis Staphylococcus
catarrhalis Moraxella clocae

B-

[25]

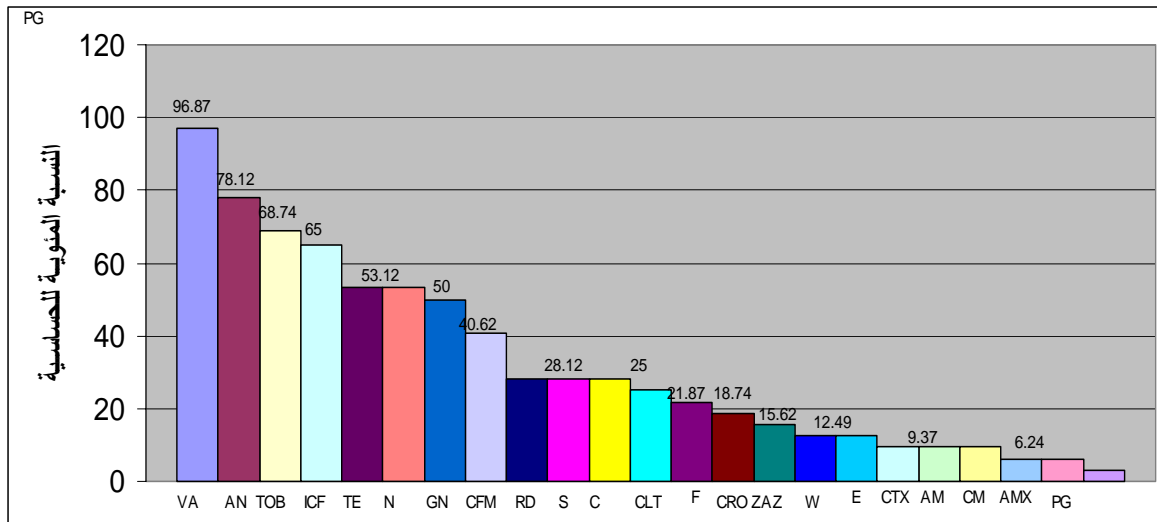
%

Candida albicans

النسبة المئوية %	عددها	العزلات المشخصة
%٤٩.٢٣	٣٢	<i>Staphylococcus aureus</i>
%٣٠.٧٦	٢٠	<i>Candida albicans</i>
%٦.١٥	٤	<i>Proteus vulgaris</i>
%٤.٦١	٣	<i>Pseudomonas aeruginosa</i>
%١.٥٣	١	<i>B-haemolytic streptococci</i>
%١.٥٣	١	<i>Klebsiella pneumoniae</i>
%١.٥٣	١	<i>Haemophilous influenzae</i>
%١.٥٣	١	<i>Staphylococcus epidermidis</i>
%١.٥٣	١	<i>Enterobacter clocae</i>
%١.٥٣	١	<i>Moraxella catarrhalis</i>

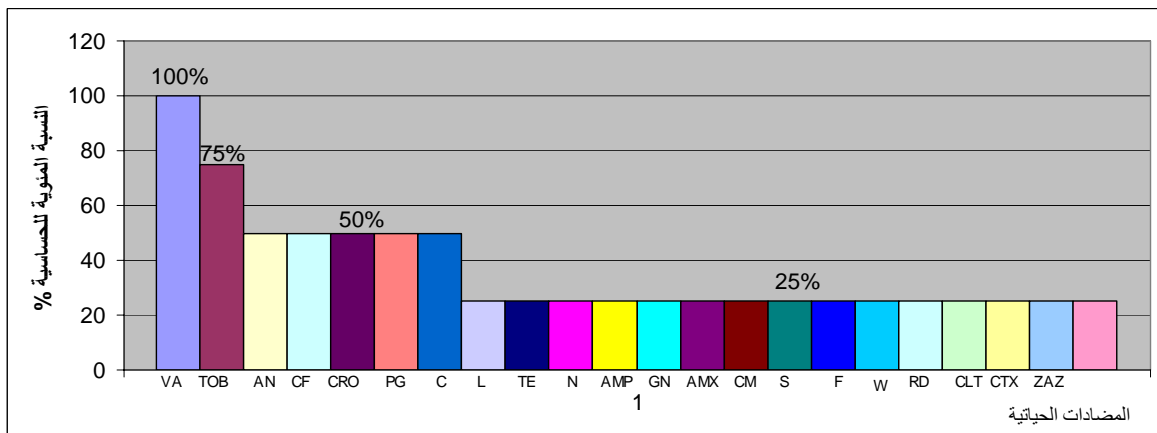
[32] David .
Staph aureus
 .
 . [33]
 Proteus vulgaris .
 Vancomycin .
 % Tobromycin %
 Ciprofloxacin Amikacin .
 Chloramphenicol PenicillinG Ceftriaxone .
 % Lincomycin .
 .% Tetracyclin .
 Pseudomonas aeruginosa .
 Vancomycin .
 % Amikacin .
 Ciprofloxacin Tetracycline .
 Peni-cillinG Streptomycin Ampicillin .
 Clindamy-cin rimethoprim Erythromycin .
 Rif- Cephalothin Cefotaxim Lincomycin .
 % . ampicin .
 Tobromycin .
 % .

haemolytic streptococci
 % .
 Enterobacter clocae
 Haemophilous Klebsiella pneumoniae
 Staphylococcus epidermidis influenzae
 [27] Barton .%
 Haemophilous Streptococcus pneumoniae
 Prellner Moraxella catarrh-lis influenzae
 Haemophilous [31]
 Streptococcus pneumoniae influenzae
 Moraxella catarrh-alis هي مسببات رئيسية مهمة
 لاصابات الاذن الوسطى القيحي الحاد ولجميع الفئات العمرية
 ()
 % () %
 C. = ()
 % Staphylococcus aureus+ albicans
 Staph. aureus + Pseudomonas = ()
 Staph. = % aeruginosa
 .% aureus+ Proteus vulgaris
 Staph. aureus
 Vancomycin
 % . Amikacin % .
 Ciprofloxacin % . Tobramycin
 Neomycin Tetracyclin %
 % .
 % . Lincomyin



Staph. aureus

:



Proteus vulgaris

:()

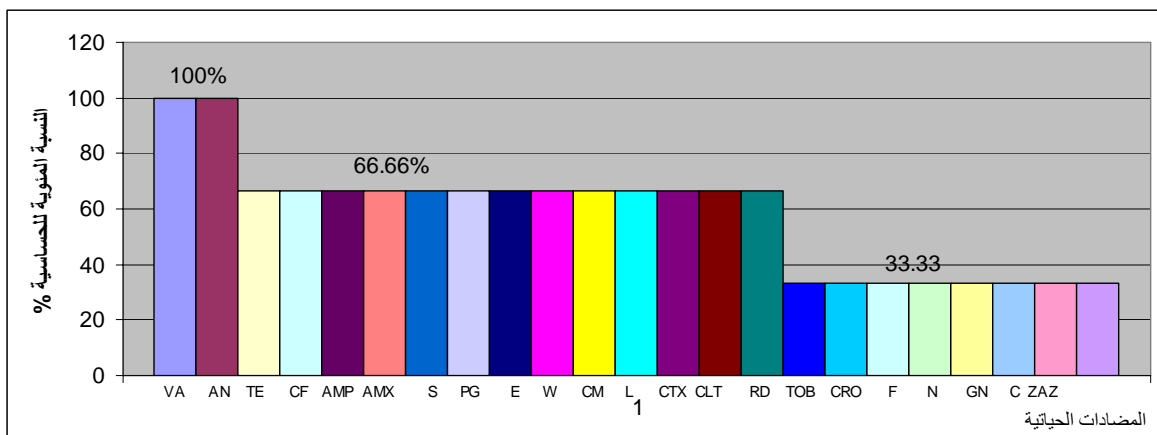
E:Erythromycin
C:Chloramphenicol
GN:Gentamycin
CM:Clindamycin
AMX:Amoxicillin
PG:Penicillin G
L:Lincomycin
RD:Rifampicin

S:Streptomycin
AN:Amikacin
AM:Ampicillin
F:Nitrofurantion
CRO:Ceftriaxone
ZAZ:Ceftazidime
W:Trimethoprim

VA:Vancomycin
CLT:Cephalothin
CF:Ciprofloxacin
TE:Tetracyclin
N:Neomycin
CFM:Cifixime

CTX:Cefotaxime

TOB:Tobramycin



المضادات الحيوية

Pseudomonas aeruginosa

+	-	+	٥
-	-	+	٦
-	-	-	٨
-	-	+	٩
-	+	-	١٠

Proteus vulgaris

Amikacin

(Tetracyclin Ciprofloxacin Tobromycin)

Amikacin

% .

Tobromycin

(Tetracyclin Ciprofloxacin Amikacin)

.Tobromycin

Candida albicans

C. albicans

Nystatin

/

(. .)

)

Miconazole

Ketoconazole

(.)

Fluconazole

(. .)

(. .)

Griseofulvin

()

Nystatin

[]

Murray

Ergosterol Sterole

Proteus vulgaris

Tobromycin Amikacin

Tobromycin +	Tobromycin +	Tobromycin + Amikacin	Amikacin +	Amikacin +	Amikacin +		
Tetracyclin	Ciprofloxacin		Tetracyclin	Ciprofloxacin	Tobromycin		

: ()

Synergistic effect

Staph.

aureus

Amikacin

Tetracyclin, Ciprofloxacin,

Tobramycin

Amikacin

2

. % .

Amikacin

:2

Staph. aureus

Amikacin +	Amikacin +	Amikacin +	رقم العزلة
Tetracycline	Ciprofloxacin	Tobromycin	
+	+	-	١
+	+	+	٢
+	+	+	٣
+	+	+	٤
+	+	+	٥
+	+	+	٦
+	+	-	٧

Tobromycin

Amikacin

Tetracycline Ciprofloxacin

Tobromycin

Staph. aureus

. % .

Tobromycin

:

Staph. aureus

Tobromycin +	Tobromycin +	Tobromycin +	عزلات بكتريا Staph. aureus
Tetracycline	Ciprofloxacin	Amikacin	
-	+	+	١
-	+	+	٤

			-	-	+		<i>Proteus vulgaris</i>
			-	+	+		
+	-	+					

- + حصول تآزر
- - عدم حصول تآزر

C. albicans

:

Griseofulvin			Miconazole			Nystatin			Ketoconazole			Fluconazole			مضادات الحياة
١٠٠٠	١٠٠	١٠	١٠٠٠	١٠٠	١٠	١٠٠٠	١٠٠	١٠	١٠٠٠	١٠٠	١٠	١٠٠٠	١٠٠	١٠	التركيز مايكروغرام/مل
٦	٠	٠	١٥.٣	٨	٠	١٨.٧٦	١١.٨	١٠	١٤.٩٤	٩.٦	١٠	١٢.٦	٩.٦	٠	عزلات خميرة <i>C. albicans</i>

Ceftriaxone 30	≥	≤	
Neomycin 10	≥	≤	
Tetracyclin 30	≥	≤	
Amikacin 30	≥	≤	
Streptomycin 10	≥	≤	
Erythromycin 15	≥	≤	
Nitrofurantion 300	≥	≤	
Trimethoprim 1.25	≥	≤	
Rifampicin 5	≥	≤	
Tobromycin 10	≥	≤	
Cephalothin 30	≥	≤	

Miconazole

Cytochrome-demethylase

Ergosterol Lanosterol

. []

:6

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/			
	≥	≤	
Ampicillin 10	≥	≤	
Chloramphenicol 30	≥	≤	
Penicillin G 10	≥	≤	
Clindamycin 2	≥	≤	
Amoxicillin 10	≥	≤	
Cifixime 5	≥	≤	
Ceftazidime 30	≥	≤	
Gentamicin 10	≥	≤	
Vancomycin 30	≥	≤	
Cefotaxime 30	≥	≤	
Lincomycin 15	≥	≤	
Ciprofloxacin 5	≥	≤	

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