

***	**	*
-	***	-
2007/9/12 :		2007/4/26:
		:
	160	160
% 29	% 30	% 29.37
	.	60
% 34.04 (% 14.89)	(% 17.02)	(% 21.27)
	% 6.38	% 2.12
	.	:
		:
	(5)	(3) · (2) · (1)
) :		% 50
10 ⁵	((4)
	.	.
		-

Asymptomatic Urinary Tract

.⁽⁶⁾ Infection

المواد وطرق العمل

(160)

24 37 °C
4 °C

2002

. 2002

()

85

()

(Cinrifuge)

15 / 3000

(Mid-

Stream Urine “ MSU)

(Cover slip)

(HPF 40X)

(Pus cells)

) (Crystals)

(RBCs)

.⁽⁹⁾ (Casts

. (7)

.1

.2

Gram’s stain

(Biochemical tests)

.3

.⁽¹⁰⁾

0.001

(Standard loop)

API 20 E

(Blood agar)

. (MacConkey)

.⁽¹¹⁾ (WHO)

. (8)

24

37 °C

100)

/ 10⁵

. (

% 29.37

8 – 2)

((1)

. (% 29.37)

% 44

(12)

(113 50)

%94

(% 29.37)

⁽⁴⁾Hajarnis

(Puscells)

)

8 – 1)

% 6.3 (

(

. %22.9

(Full High Power

. Field)

(1)

29

%30

(13)

%

Mycobacterium

tuberculosis

. 1: 1.28

⁽⁶⁾ Shanson

Bacteroides fragilis

(Urethra)

(Preineum)

%85.84

% 29.89

(97)

10

(29)

(+)

(16) (15) (14)

(%95.74)

S. epidermidis
 . (3) (% 34.04)

(13) (17) 60
 . (% 47.82) (2)

E. coli (17)
 % 38.28 % 40.1 60

S. epidermidis
E. coli
 (13) (17)

E. coli (18)

(% 42.10)
S. epidermidis 20 –15
 (12)

% 31.25
 16 5) . (% 41.2) 30 –20
S. epidermidis

. (Catheter)
S. (6) Shanson
epidermidis (19) Myrrik *etal.*

(Catheterization)
 (Slime)

(19)
 % 29.37
 % 50
 (4) (16 8) . (3)
 45 –59

	(16)		
<i>Proteus</i>		(21) Pichette	(20) Klufio <i>etal.</i>
	<i>mirabilis</i>		60 - 40
	%17.02		
(27)	Ledingham		
	<i>Proteus mirabilis</i>	(Urease)	
	(Fimbriae)		
(28)		(22)	
<i>Klebsiella pneumoniae</i>		(24) (23)	
	% 14.89		
	(% 18.1) (29)	(25) Clarridge <i>etal.</i>	
	<i>Klebsiella</i>		
<i>E. coli</i>	(16) (5)	<i>E. coli</i>	
		% 21.27	
		Haslett	(16)
(6)	<i>Pseudomonas</i>	<i>E. coli</i>	
	% 6.38	<i>aeruginosa</i>	
	(12)	(6)	
<i>Pseudomonas</i>		(26)	
	% 6.6	<i>E. coli</i>	
<i>Ps. aeruginosa</i>			
(18)		<i>E. coli</i>	
		(Lectin molecules)	
	(30)	(Glycolipid)	
3		(Glycoprotein)	

- the treatment of urinary tract infection : A multicenter trial .
Chemotherapy , 35 (suppl 1) : 8-14 .
(% 33.33) .[
- (19)
- [3] Sokeland , J. (1989) . Infections diseases : Non specific infections disease . In: Urology. 2nd ed. Thieme textbook .P. 164. %2.12
- [4] Hajarnis, S.(1996). Suspected urinary tract infection:Identification of micro- organisms and Sensitivity to antiniotics in Seychelles .Seychelles medical and Dental journal. 1996 issue- 1997 issue .
. *Enterococcus (streptococcus) faecalis* .
(6) (31)
- [5] Brees , M . H. and Berkow , R.(2000) .The Merck manual of Geriatrics. 3rd ed. Section 12. Ch. 100. Merck and Co ., Inc . USA. Gentamicin +Ampicillin
Vancomycin
(6)
- [6] Shanson , D.C.(2000) .Microbiology in Clinical Practice. 3rd ed. Butterworth Heinemann .Oxford . P: 326 – 339. *Citrobacter freundii*
(% 2.12)
- [7] White , R.H.R. (1987) . Management of urinary tract infection. Arch . Dis. Childh. 62 : 421-427 . (31) Brooks
- [8] Collee, J.G ., Duguid, J. P., Franser , A. G., Marmion , B. P. , and Simmons , A. (1996) . Laborator startegy in the diagnosis of infective Syndromes . In : Makie and McCartne Practical Medical Microbiology . By : Collee , J. G., Marimion , B. P., Fraser , A. G., and Simmons, A. 14th ed . Churchill Livingstone. New York . P. 87–88. . (Sepsis)
% 2.12 *Candida albicans*
(70)
- [9] Bauer, A. W., Kirby, W.A.M., Sherris, J.S., and Turk, M. (1966). Antibiotic Suscebtility testing by a standardized single disc method . Am . J. Pathol . 45:493–496.
- [10] Alexander , S.K.and Strete , D. (2001) .Microbiology : Aphotographic Atlas for the Laboratory. Benjamin Cummings . San Francisco . P . 69-93 , 96 – 100 .
- [11] Vandepitte , J., El – Nageh , M., Tikhomirov , E., and Stelling, J. M. (1996). Guidelines for antimicrobial resistance (6) Shanson
- المصادر
- [1] Fischbach , M., Simeoni , U., Mengus , L . , Jehl , F ., Monteil , H. ; Geisert, J.and Janin , A.(1989) .Urinary tract infections with tissue penetration in a children : Cefotaxime Compired with Amoxycillin/clavulanate . J.Antimicrob . chemother . (24): 177-183.
- [2] Martelli , A., Cortecchia , V., and Ventriglia , L.(1989). Aztreonam in

- [22] Elliot , J. , Sharp , R ., and Lewis, L.(1959) .The solubility of Struvite in urine . J. Urol . 81 : 366 – 368 .
- [23] Hedelin , H. , Brorson , J. , Grenabo , L ., and Pettersson , S. (1984) .Ureaplasma urealyticum and upper urinary tract stones . Br . J. 56 : 244 – 249 .
- [24] Dewan, B., Sharma , M ., Nayak , N. , and Sharma , S. (1997). Upper urinary tract Stones and Ureaplasma urealyticum. Ind. J. Med . Rex . 105 : 15-21.
- [25]Clarridge, J. E.; Pezzlo, M. T. and Vostia, K. L. (1987) . Laboratory diagnosis of urinary tract infections. Washington, DC American society for Microbiology.
- [26] Jawetz, E., Melnick, J.L., Adelberg , E.A., Brooks, G.F., Butel, J.S.and Ornston , L.N.(1989) .Medical Microbiology. 18th ed . Appleton & Lange .
- [27] Ledingham , J.G.G.and Warrell , D.A.(2000) . Concise Oxford textbook of Midicine . Oxford university press, Oxford. P. 1167 – 1168 .
- [28] Duguid , J.P.and Old , D.C.(1980) .Adhesive properties of Enterobacteriaceae. In : Bacterial adherence, Receptors and recognitions. By : Beachy, E.H. (ed). Champman & Hall, London. SeriesB. (6) : 185-217. (2000) [29] surveillance . World Health Organization. Alexandria, Egypt. . (1996) [12]
- [13] AL-Fahdawi , AR.M.G.(2001) . Influence of blood groups on the availability of receptors of uroepithelial cells for attachment of uropathogenic bacteria causing urinary tract infections (UTIs) . M.Sc. thesis coll of Med . Univ of Baghdad . Iraq .
- [14] Alleyne , G. (1980) . Urinary tract infections . Med .Digest . Vol .6 , No . 12 .
- [15] Edwards , R . W. and Bouchier , A. D. (1991) . Davidson's Principles and Practice of Medicine . 16th ed . Churchill Livingston. . New york . P. 576-578 .
- [16] Haslett, C., Chilvers , E.R., Hunter , J.A.A.and Boon , N.A. (1999). Davidson`s principles and Practice of medicine .18th ed. Churchill Livingstone, New York .P. 458-470 .
- [17] AL-Hadithi , H.A.(1996) .Urinary tract infection in Ramadi city : A bacteriological study . J.AL-Anbar uriv 1 (1) : 76 – 81 .
- [18] Sleigh , J.D. and Timbury, M. C. (1998). Notes on Medical Bacteriology. 5th ed. Churchill Livingstone .P. 245 – 252.
- [19] Myrrik , Q.N. and Weiser , R.S.(1988) . Fundamentals of medical Bacteriology and Mycology . 2nd ed. Lea & Febiger, Philadelphia. P. 146.
- [20] Klufio , G., Bentsi , I. ,Yeboah , E., and Quarey , J. (1996). Upper urinary tract stones in Accra , Ghana. West . Afr . J. Med. 15 : 173-176 .
- [21] Pichette , V., Bonnardeaux , A., Cardinal , J. , Houd , M., Nolin , L., Boucher , A., and Ouimet, D. (1997). A mmonium acid urate crystal formation in adult North American stone formers. Am. J. Kidney. Dis. 30 : 237-242 .
- [30] Strickler, D.J., Clayton, C.L., Harber, M.T., and Chawla, J.C. (1988). *Ps. aeruginosa* and long-term indwelling bladder catheters.Arch .Phys. Med. Rehabil. 69:25-28.
- [31] Brooks , G.F., Butel, J . S., and Morse, S. A. (2001). Jawetz, Melnick and Adelberg`s Medical Microbiology . 29th ed . Lange Medical Books / McGraw – Hill, New york . P. 217-228 , 637 – 638.

(1)

عدد عينات الإدرار الكلي	عينات الإدرار ذات النمو الجرثومي غير المعنوي والسالب		عينات الإدرار ذات النمو الجرثومي المعنوي		الجنس
	%	العدد	%	العدد	
93	71*	66	29*	27	ذكور
67	70*	47	30*	20	إناث
160	70.62	113	29.37	47	المجموع الكلي

*

(2)

%	العدد	%	العدد	%	العدد	%	العدد	%	العدد
20	1	5	25	2	8	23.07	3	13	14 - 0
42.10	8	19	20	5	25	29.45	13	44	29 - 15
18.18	4	22	11.76	2	17	15.38	6	39	44 - 30
31.25	5	16	36	9	25	34.14	14	41	59 - 45
40	2	5	50	9	18	47.82	11	23	> 60
29.85	20	67	29.03	27	93	29.37	47	160	المجموع

(3)

%		
34.04	16	<i>Styphylococcus epidermidis</i>
21.27	10	<i>Escherichia coli</i>
17.02	8	<i>Proteus mirabilis</i>
14.89	7	<i>Klebsiella pneumoniae</i>
6.38	3	<i>Pseudomonas aeruginosa</i>
2.12	1	<i>Enterococcus faecalis</i>
2.12	1	<i>Citrobacter freundii</i>
2.12	1	<i>Candida albicans</i>
100	47	

(4)

> 60		60 - 45		44 - 30		29 - 15		14 - 0		العدد الكلي	الإصابات الجرثومية
%	العدد	%	العدد	%	العدد	%	العدد	%	العدد		
6.25	1	50	8	12.5	2	31.25	5	0	0	16	<i>Staphylococcus</i>
30	3	10	1	10	1	30	3	20	2	10	<i>E. coli</i>
37.5	3	37.5	3	0	0	12.5	1	12.5	1	8	<i>Proteus</i>
42.85	3	28.57	2	14.28	1	14.28	1	0	0	7	<i>Klebsiella</i>
0	0	0	0	66.66	2	33.33	1	0	0	3	<i>Pseudomonas</i>
0	0	0	0	0	0	100	1	0	0	1	<i>Enterococcus</i>
0	0	0	0	0	0	100	1	0	0	1	<i>Citrobacter</i>
100	1	0	0	0	0	0	0	0	0	1	<i>Candida</i>
23.4	11	29.78	14	12.76	6	27.65	13	6.38	3	47	المجموع

A STUDY ON URINARY TRACT INFECTIONS IN AL-RAMADI GENERAL HOSPITAL IN AL-ANBAR GOVERNORATE

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ABSTRACT: Results of culturing 160 urine specimen taken from 160 patients suffering from symptoms of urinary tract infection (UTI) in Al-Ramadi general hospital in Al-Anbar governorate that actual percentage of UTI in patients were 29.37% , and that the above mention infection was more in females 30% than in males 29% , and the most who affected were the age group above 60 year.

Eight microorganisms were isolated, the commonest microorganisms were *Staphylococcus epidermidis* (34.04%), *E. coli* (21,27%), *Proteus mirabilis* (17.02%), *Klebsiella pneumoniae* (14.89%), *Pseudomonas aeruginosa* (6.83%), and finally *Enterococcus faecalis* (2.12%), *Citrobacter freundii* (2.12%) and *Candida albicans* (2.12%).