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83/11/14 : 83/8/23 :

Impact of Hemoglobin levels Before and During Radiotherapy on the Prognosis of Treatment in Patients with Cervical Carcinoma

Abstract :

Objective: Since anemia in patients with cervical cancer is accompanied by poor prognosis in this research we studied the hemoglobin levels before and during radiotherapy.

Materials & methods : During a four-year period a prospective study was done on 201 patients with cervical cancer in the Radiotherapy section of Ghaem Hospital carried on and 54 patients selected. During and before treatment, the hemoglobin level (Hb) was measured repeatedly in the above mentioned patients, and the patients whose (Hb) level was below 12 g/dl were considered anemic . The second procedure was comparing the age , stage , survival recurrence and disease free survival in two groups anemic and normal.

Results : 41.7% of the patients were anemic before treatment and 58.3% were normal. 56.8% of the latter group became anemic after radiotherapy .

The average age in anemic patients was 52.33 years and in normal patients was 53.93 .

The stage of disease showed little difference between two groups.

Response to radiotherapy after 3 months of treatment in the anemic group was 57.1% and in the second group was 66.7% , $P=0.48$, Comparison in overall survival led to this result, in the first group (anemic) 37% and in second group 41% , ($P=0.941$).

Disease free survival in the first group was 8 months, and the second group was 10.67 months($P=0.748$). Disease-free survival in later anemic patients was 6.28 and in normal group was 8.09.

Conclusion : Although the low HB level (under 12g/dl) showed an increase in local recurrence and a decrease in overall survival , this difference was not significant statistically.

Key words: Cervical Cancer – Blood Hemoglobin – Radiotherapy –Prognostic factors .

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60

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(9)

HPV¹

(10)

(12)

(3)

()

(4)

54 1377 81

(5)

()

50 60

(6)

(7)

DFS²

³

(8)

¹ - HPV- Human papilloma virus

² - Disease Free –Survival

³ – Obermaier

183

1/3

(%73/3) 134

54

Hb

FIGO²

(Iv_b)

Four-Bax

55 73

60

180 200cGy

cGy

(Hb)

OS

12

Hb

DFS

10

Hb

Packed cell

201

(1377 1381)

183

(OS)³

(%73/3) 134

(DFS)

(stage FIGO >IIA)

SPSS

54

(⁵)

T

Chi-square

log

rank

Hb

⁴

1- Simple Hysterectomy
 2- FIGO:Federation International Gynecology Organization
 3- Overall survival
 4- Kaplan Mayer
 5- Curative dose

(
 %64/1. 23 90 52/28 (201)
 %5/1. (54)
 26 76 48/73

%30/8.
 %50)

.(3) (

1

(3)

1377 1381 ()

1377 81 ()

30/8	24	
5/1	4	
64/1	50	

54=	201 =	
26 76=48/7	23 90=52/28	
14 29=18/23	13 29=17	
40/7	33/8	
35/6	26/2	
SCC 91/5	SCC 93/7	
6/8	%21/7	
76/08	%58/82	
17/12	20	

%53/7

%3 %43/3

.(54)

Hb % 38/9

12

6068 cGy

(5600 7200 cGy)

.(2)

(cGy 5500 7400 6747 cGy

(2)

()

1377 81

12 (%57/1)
 (%42/9) 9

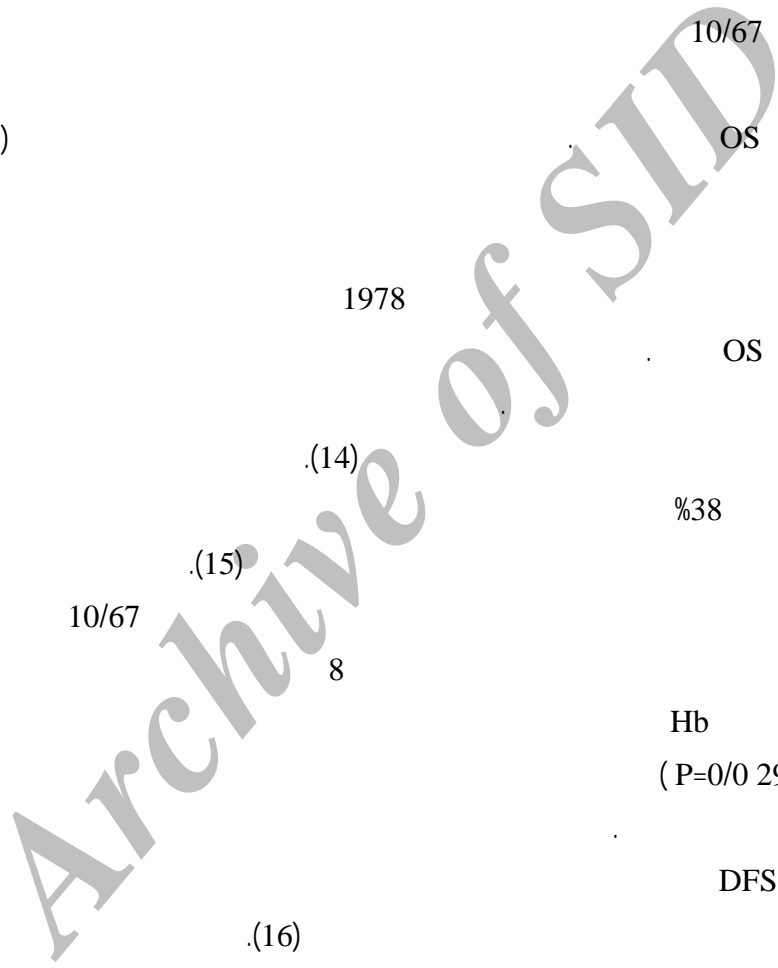
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%57/1	%43/8	%50	%47/1	%36/4	%32	%56/8	%41/7	<12
%42/9	%56/2	%50	%52/9	%63/6	%68	%43/2	%58/3	<12<

(%33/3) 11

(%66/7) 22

)

12 Hb P=0/361 8/09 DFS (OS) P=0/48
 : (DFS)
 %37
 12 Hb (11) 8 %41 (P=0/317)
 10/67 OS
 (12 13) OS
 1978 OS
 (14) %38 %25 (P=0/31)
 Hb (15) 10/67 8 Hb
 Hb (P=0/0 29) (P=0/03)
 DFS
 (16) Hb DFS
 %37 %41
 (54) P
 (P=0/31) 0/595 0/753 :
 3 0/07 0/461 0/962 0/99
 %38 %25 DFS
 6/28 DFS 12



(19 20) %80
DFS

(17)

: Girinski (18)
386

10 Hb

10 Hb

Archive of SID

21	()	5	:
			54
			12
%56/8		%58/3	41/7 :
	53/93	52/33	
%57/1			
%41	0/37		.(P=0/48) %66/7
8	10/67		(P = 0/941) . (P=0/317)
			.(P=0/748)
8/09	6/28		
			.(P=0/361)
		12	:

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