Doxifluridine, Cisplatin
Doxifluridine, Cisplatin

2002, 6
I. .......................................................... 4

II. .......................................................... 8
  1. ...................................................... 8
  2. ...................................................... 8
      ............................................... 8
      ............................................... 9
      ............................................... 9
      ............................................... 10
      ............................................... 10
III. -component ................................................................. 11
  1.  -component ............................................................. 11
  2.  -component ............................................................. 13
  3.  -component ............................................................. 15
  4.  -component ............................................................. 15
  5.  -component ............................................................. 16

IV. -component ................................................................. 17

V. -component ................................................................. 20

-component ................................................................. 22

-component ................................................................. 26
<p>| | |</p>
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<tbody>
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<td>1.</td>
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<tr>
<td>2.</td>
<td>.................................................. 12</td>
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<tr>
<td>3.</td>
<td>.................................................. 16</td>
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</tbody>
</table>
Doxifluridine, Cisplatin

2 to 5 cycles 30-49% 30-45% 10-30% 32-59% 29-45%
5% 30-70%

3, 4 cycles 20%

5-FU, methotrexate, mitomycin, doxorubicin, nitrosourea 20-30%, 30-50%
5'-deoxy-5-fluoridine (doxifluridine, 5'-DFUR) 5-FU 10-15% 15% 15% thymidine phosphorylase 5-FU 10-15% 15% 15% 5'-DFUR 5-FU 10-15% 15% 15% 5-FU ribonucleotide diphosphate reductase 5-fluoro-2'-deoxyuridine-5'-phosphate (F-dUMP) 5'-DFUR 5-FU 10-15% 15% 15% 1980 cisplatin 5-FU 12% 1999 117% doxifluridine, cisplatin 43% 3% 60% 4% 57% 52% 12% WHO 3% 22% 3% 12% 12% doxifluridine, cisplatin
FP (5-FU, cisplatin) are commonly used as chemotherapy agents.

Moreover, other agents such as doxifluridine and cisplatin are used as well.
Doxifluridine, Cisplatin
2% 1- 5% 30- 49% 10- 30% 4
32- 59% 31% 29- 45% 5
50% 30- 70% 6
1998 UICC-TNM 7
1.10
cell-kill kinetics 11
4-6. Fisher\textsuperscript{12} also stated that this treatment significantly reduced the growth of tumor volumes. Hallissey\textsuperscript{14} found that FAM (5-FU, adriamycin, mitomycin) in combination with 5-iododeoxyuridine (5-iodo-\text{\textsuperscript{1}}\text{\textsuperscript{125}}) reduced tumor growth. Jakesz\textsuperscript{15} tested picibanil, mitomycin-C, 5-FU, arabinoside C, and found that the combination of 4.5% picibanil and 5-FU significantly reduced tumor growth.\textsuperscript{16}

In another study, FAM (5-FU, methotrexate, mitomycin-C, doxorubicin, nitrosourea) in combination with 20% 5-iodo-\textsuperscript{125} reduced tumor growth.\textsuperscript{17}

Fisher\textsuperscript{12} and Hallissey\textsuperscript{14} also reported that the combination of 5-FU, methotrexate, mitomycin-C, doxorubicin, nitrosourea reduced tumor growth by 30-50%\textsuperscript{18}. 
5'-deoxy-5-fluoridine (doxifluridine, 5'-DFUR) 5-FU 5'-DFUR has been shown to inhibit thymidine phosphorylase [10, 11, 12] and 5-FU [13, 14]. 5'-DFUR has been used in combination with 5-FU (10-15% response rate). [19] Ahn [20] reported a 19% response rate with 5'-DFUR cisplatin. 5'-DFUR cisplatin was reported to increase response rate to 27.7%. [20] Takiguchi [21] reported a 5'-DFUR 5-FU combination in 1980 showed a response rate of 11-12%. 5'-DFUR 5-FU combination did not significantly increase the response rate over 5-FU alone. [22, 23]

5-FU, doxifluridine, cisplatin
II. ੧੧ ਡ੧

1. ੧੧

1997 1999 12 18-70 (adenocarcinoma) II-IV(M1 ੧੧) (Hemoglobin ≥10g/dL, WBC ≥4000/mm³, platelet ≥100,000/mm³, Creatinine <2.0mg/dL) 70 ਡ੧, ਡ੧ ਡ੧ ਡ੧ ਡ੧ ਡ੧, ਡ੧ ਡ੧ ਡ੧ ਡ੧ ਡ੧.

2. ੧੧
1998 Japanese Classification of Gastric Carcinoma- 2nd English Edition- Upper third, Middle third, Lower third. 24

1997 Union International Contra la Cancrum (UICC) N-stage 5

Cisplatin 80mg/m² 25% 60mg/m² 40mg/m² 50mg/m² 6
WHO 200 80% 30 100 600 900 mg cisplatin 6 900 mg 600 mg.

Table

WHO 200 80% 30 100 600 900 mg cisplatin 6 900 mg 600 mg.

Analysis

The analysis was performed using the SPSS package (version 10.0). Kaplan-Meier method, log rank test, Cox regression, and p-value 0.05.
III.  

1.  

<table>
<thead>
<tr>
<th>Year</th>
<th>Stage I</th>
<th>Stage II</th>
<th>Stage III</th>
<th>Stage IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>83</td>
<td>34</td>
<td>68</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>79%</td>
<td>21%</td>
<td>58%</td>
<td>42%</td>
</tr>
</tbody>
</table>

Stage distribution in 117 cases.

Stage I 13/117 (11%), Stage II 85/117 (73%), Stage III 19/117 (16%).

II (tubular adenocarcinoma) 90/117 (77%).
### Table 2

#### Gastric (117)

| Borrmann | I | 5  | 4% |
|          | II| 21 | 13%|
|          | III| 74 | 68%|
|          | IV| 17 | 15%|

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Upper third</td>
<td>9</td>
<td>8%</td>
</tr>
<tr>
<td>Middle third</td>
<td>45</td>
<td>38%</td>
</tr>
<tr>
<td>Lower third</td>
<td>56</td>
<td>48%</td>
</tr>
<tr>
<td>Whole stomach</td>
<td>7</td>
<td>6%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Diameter</th>
<th>Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5cm</td>
<td>44</td>
<td>38%</td>
</tr>
<tr>
<td>5cm</td>
<td>73</td>
<td>62%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T</th>
<th>Cases</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>10%</td>
</tr>
<tr>
<td>3</td>
<td>94</td>
<td>80%</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>9%</td>
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</table>

<table>
<thead>
<tr>
<th>N</th>
<th>Cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>0</td>
<td>15</td>
<td>13%</td>
</tr>
<tr>
<td>1</td>
<td>41</td>
<td>35%</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>40%</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>12%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Histology</th>
<th>Cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Tubular</td>
<td>90</td>
<td>77%</td>
</tr>
<tr>
<td>Papillary</td>
<td>1</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Mucinous</td>
<td>6</td>
<td>5%</td>
</tr>
<tr>
<td>Signet ring cell</td>
<td>20</td>
<td>17%</td>
</tr>
</tbody>
</table>

Well differentiated 33%, moderately differentiated 33%, poorly differentiated 54%. 
2. 7- 56 months 15%

Cisplatin 60mg/m² 36%, 80mg/m² 60%, 40mg/m² 9%, 50mg/m² 12%. Doxifluidine 600mg 86%, 900mg 31%. 6 months 21%, 14%, 22%. 1 year 60%, 4 years 56%.
2. Survival by stage

Stage II: 100%  Stage III: 64% (p=0.02)  Stage IV: 20%

cisplatin 60mg/m²  28  40

doxifluirdine 600mg, cisplatin 80mg/m²  25  72%, 64%

p-value: 0.25  60%
3. WHO

WHO 102 39 14 12% 16 14% 13 31 39 26 22% 2 5 4%.

4. 3- 59 29 29 87% 102 50 33 3 6 12 (24%), 32 (64%), 3 (6%).

0-42 4.5 9 6 74%. 0-42 4.5 9 6 74%.
3% of these 6% were 26% (p<0.01).

5. Discussion

With 3%, 1%, 2%, and 6%, Borrman, T, N, 5, and cisplatin 80mg/m²/4 cycles 100% and 100% of the time. T stage (p<0.01, risk ratio 3.69), N stage (p<0.01, risk ratio 2.76) and 5 cycles.

- Table 3

<table>
<thead>
<tr>
<th></th>
<th>p-value</th>
<th>risk ratio</th>
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<tbody>
<tr>
<td></td>
<td>0.242</td>
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</tr>
<tr>
<td></td>
<td>0.848</td>
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</tr>
<tr>
<td></td>
<td>0.792</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.732</td>
<td></td>
</tr>
<tr>
<td>T</td>
<td>0.003</td>
<td>3.69</td>
</tr>
<tr>
<td>N</td>
<td>0.001</td>
<td>2.76</td>
</tr>
<tr>
<td>Borrman</td>
<td>0.795</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.096</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.324</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.376</td>
<td></td>
</tr>
</tbody>
</table>
IV.  

...
5'- deoxy- 5- fluoridine (doxifluridine, 5'- DFUR) 5- FU, cisplatin 50- 60% 5- FU, cisplatin 6 5- FU, cisplatin 5- FU, 5'- DFUR 5- FU, 10-15% 5- FU, 15% 4- 8% 3% 60%, 4% 56%, 18% 5- FU, cisplatin Shimada 2% 63% 5% 11- 67% 55- 69%, 29- 73% 51% 60% 21% 69% 5- FU, cisplatin 73%
WHO estimates 30% of cases of cancer are preventable. 12%
are caused by environmental factors and 22% by
behavioural factors.

Chemotherapeutic agents like doxifluridine, cisplatin,

doxifluridine, cisplatin, and 5-FU (5-fluorouracil) are
effective in treating 30% of cases at 60% cure rates.

V. 

cisplatin 60%, 4 56% 51%. 12% WHO 3 22% 3 , 2 . doxifloridine, cisplatin 2 .
6. 5-Fluorouracil, Adriamycin, Mitomycin-C
1999;13;1485- 94.

17. ੲੰ੪. ཐੱ་ འཛོ་ རིང༌་ རིང༌། ། ༡༡: རིང༌་ རིང༌།. 2000; 8: 68- 74. ། རིང༌་ རིང༌།.

18. ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་ ཐྨ་. འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་ འཛོ་. FP(5- FU, Cisplatin) འཛོ་ འཛོ་ འཛོ་ 1998;30:482- 87.


25. گزارش کننده تحقیقات. تحقیق در مورد روش های تشخیص در مورد - 5 - 1995.


Abstract

**Adjuvant chemotherapy with doxifluoridine and cisplatin after curative resection of advanced gastric cancer: a retrospective analysis**

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*Department of Medicine*

*The Graduate School, Yonsei University*

(Directed by Professor Si Young Song)

Gastric carcinoma is quite common and is the major cause of cancer-related death in Korea.

Curative surgical resection has been only effective treatment in advanced gastric cancer. For stage III, IV cancers, the risk of local-regional recurrence as well as distant failure is high. In western countries, the 5-year survival rate for stage III gastric cancer is 10-30%. In Japan the 5-year survival rate for stage III gastric cancer is 29-45%.

In western countries, postoperative adjuvant chemotherapy after curative resection of advanced gastric cancer has not proven to be effective against surgery alone. But in Japan, in contrast, there were a few papers which insisted the
effectiveness of postoperative adjuvant chemotherapy.
Until now, the therapeutic regimens widely used in advanced gastric cancer were, 5-FU, methotrexate, mitomycin, doxorubicin, nitrosourea.
Doxifluridine is the synthetic prodrug of 5-FU. Therapeutic index of doxifluridine is 10 to 15 times that of 5-FU. Anticancer effectiveness of cisplatin has been accepted since 1980 and synergistic effect with doxifluridine was confirmed in animal studies.
We, therefore, study the therapeutic effectiveness of doxifluridine and cisplatin for patients with advanced gastric cancer after curative resection. This study include patients who were treated with adjuvant chemotherapy with doxifluridine and cisplatin after curative resection of advanced gastric cancer at Shinchon Severance Hospital, Seoul, Korea, from Jan 1997 to Dec 1999.
There were total 117 patients included in this study. The overall 3-year survival was 60% and the 4-year survival was 56%. 12% of total patients showed hematologic toxicity grade III and IV by WHO criteria and 22% of total patients showed gastrointestinal toxicity grade III and IV.

In conclusion, adjuvant chemotherapy with doxifluridine and cisplatin in patients with advanced gastric cancer after curative resection was as effective and tolerable as other chemotherapeutic agents.
We hope that prospective and long term follow up study for postoperative adjuvant chemotherapy be undertaken.

Key words: advanced gastric cancer, curative resection, adjuvant chemotherapy, doxifluridine, cisplatin