



EBM Educational Prescription

Department: 內科 Date:
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* 臨床個案摘要：（個案病歷號：
1x9x4xx4）

○ Brief History

This 71 y/o female is a case of intrahepatic stone with left lobectomy, ten years ago. Liver cirrhosis child's A. HCV Hepatitis.

abdominal echo showed liver tumor over S6 4.5cm then she had received the liver aspiration biopsy on 96/06/01 and the pathology result was ,hepatocellular carcinoma.

and lab data showed elevated Alpha fetoprotein 42.5ng/ml.



Asking an answerable question (PICO)

- **Patient and/or problem:**

A 71 years old female with Hepatocellular Carcinoma T1N0M0 not suitable for operation.

- **Intervention/ or exposure:**

Transarterial Chemoembolization and
Radiofrequency Ablation

- **Comparison intervention :**

Transarterial Chemoembolization

- **Outcomes:**

complication rate, recurrent rate, survival
rate, quality of life



One Question Sentence:


- Does Transarterial Chemoembolization with Radiofrequency Ablation decrease complication rate, recurrent rate, or increase survival rate and QOL than Transarterial Chemoembolization for an old female with hepatocellular Carcinoma?
- ***Type of Question:*** Therapy



尋找文獻證據

(Tracking down the best evidence)

- Database :
PubMed, medline
- Key words and search tactics:
(Hepatocellular carcinoma, HCC,
transcatheter arterial chemoembolization,
TACE) limit to english and RCT. 24HitS
- (Hepatocellular carcinoma, HCC,
Radiofrequency Ablation, transcatheter
arterial chemoembolization, TACE) limit
to english and RCT. 1HitS



Qual Life Res. 2007 Apr;16(3):389-97. Epub 2006 Nov 17. **Links**

- **Quality of life after radiofrequency ablation combined with transcatheter arterial chemoembolization for hepatocellular carcinoma: comparison with transcatheter arterial chemoembolization alone.**
- [Wang YB](#), [Chen MH](#), [Yan K](#), [Yang W](#), [Dai Y](#), [Yin SS](#).
- Department of Ultrasound, Clinical Oncology Institute, Beijing University, No. 52 Fu-cheng Road, Hai-dian District, Beijing, 100036, China.
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- **OBJECTIVE:** Comprehensive studies are scarce with regard to the quality of life (QOL) of hepatocellular carcinoma (HCC) patients after transcatheter arterial chemoembolization (TACE) and/or radiofrequency ablation (RFA) treatment. The purpose of this study was to examine the impact of TACE alone and that of the TACE followed by RFA (TACE-RFA) on QOL in HCC patients. **METHODS:** QOL was measured using the Functional Assessment of Cancer Therapy-General (FACT-G) (Version 4.0) questionnaire, translated into Chinese, as a measure of QOL among Chinese HCC patients. Prospectively, 83 patients in both TACE group (n = 40) and TACE-RFA group (n = 43) completed the questionnaire at baseline and 3 months after treatment, respectively. **RESULTS:** The TACE-RFA group resulted in a significantly higher total QOL score, socio-family well-being score, and functional well-being score than that of TACE group, 3 months after respective treatment. Liver function, tumor recurrence and complication, age, income were the most important factors affecting the QOL of HCC patients after treatment. The logistic regression analyses showed that Child-Pugh Class and tumor recurrence after treatment were independent predictors of post-treatment QOL scores of HCC patients. **CONCLUSIONS:** The overall QOL of HCC patients in TACE-RFA group was maintained at a relatively higher level than that of TACE group. TACE followed by RFA appeared to be more favorable than TACE alone with respect to QOL.
- PMID: 17111232 [PubMed - indexed for MEDLINE]



評判證據(critical appraisal)



The validity of this evidence (證據之 有效性)

- ***The validity of this evidence*** (證據之有效性)
- Were patients randomized ? Yes
- Was randomization concealed?
Yes, the randomization procedure was carried out by means of a computer-based program.
- Were patients analyzed in the groups to which they were randomized?
Yes, intention to treat
- Were patients in the Treatment and Control groups similar with respect to known prognostic factors?
Yes.
- Were patients aware of group allocation?
Yes, TACE and radiofrequency can't be concealed
- Were Clinicians aware of group allocation?
Yes, TACE and radiofrequency can't be concealed
- Were outcome assessors aware of group allocation?
Yes, TACE and radiofrequency can't be concealed
- Aside from the experimental intervention, were groups treated equally?
Yes
- Were follow-up sufficiently long and complete?
Following time 5-13 months are noted. However, according to the statement, there seem to be no loss of follow-up due to the results of all patients were all followed.

Table 1. Demographic and clinical data of the study subjects

Items	TACE group (n = 40)	TACE-RFA group (n = 43)	χ^2	p value
<i>Sex</i>				
Male	34	32	0.85	0.36
Female	6	11		
<i>Age (year)</i>				
≤ 50	7	12	3.63	0.31
51–60	18	11		
61–70	10	13		
>70	5	7		
<i>TNM stage (pre-treatment)</i>				
I–II	19	21	0.75	0.69
III	5	3		
IV	16	19		
<i>Child-Pugh Class (pre-treatment)</i>				
A (%)	32	34	0.03	0.87
B (%)	8	9		
<i>Size of tumor (cm)</i>				
≤ 3.0	18	20	1.09	0.58
3.1–3.5	9	7		
>3.5	23	16		
<i>Concomitant diseases</i>				
No	11	19	1.83	0.18
Yes	29	24		
<i>Education</i>				
High school	16	11	3.18	0.21
Technological	7	14		
College and post-college	17	18		
<i>Bearer of medical cost</i>				
Patient at one's own expense	9	5	2.26	0.33
Medical insurance	19	20		
Public support system	12	18		
<i>Income (RMB/person/month)</i>				
≤ 500 Yuan	9	5	1.75	0.42
501–1000 Yuan	17	21		
>1000 Yuan	14	17		

RFA, radiofrequency ablation; TACE, transcatheter arterial chemoembolization



The importance of this valid evidence (有效證據之重要性)

- How large was the treatment effect?
- In this study, TACE-RFA combination treatment has a higher level QOL and fewer complication than TACE alone.
- How precise was the estimate of the treatment effect?
- The difference of recurrent rate and complication rate were both not statistically significant. But the quality of life between both groups was significant ($p < 0.05-0.01$).

Table 3. The correlation coefficients (Spearman's rank correlation) among demographic factors, clinical characteristics and QOL scores in different treatment groups

QOL	Age	Income	Complications	Child-Pugh Class post-treatment	Recurrence
<i>TACE group</i>					
Total	–	0.69*	–	–0.65*	–0.49*
PWB	–	–	–0.61*	–	–
EWB	–	–	–	–	–
FWB	–0.43*	–	–0.57*	–	–0.58**
SFWB	–	–	–	–	–
<i>TACE-RFA group</i>					
Total	0.61*	–	–	–0.65*	–0.76*
PWB	–	–	–0.54*	–	–
EWB	–	–	–	–	–
FWB	–0.55*	–	–	–0.58*	–0.56*
SFWB	0.78**	–	–	–	–

PWB, Physical Well-being; SFWB, Socio-Family Well-being; EWB, Emotional Well-being; FWB, Functional Well-being

“–” indicates no statistical significance of correlation coefficient

* $p < 0.05$

** $p < 0.01$

Table 5. Comparison of deterioration in Child-Pugh Class, tumor recurrence rate and complication rate between TACE group and TACE-RFA group

	TACE group (n = 40)	TACE-RFA group (n = 43)	χ^2	p value
<i>Additional treatment times with TACE (in TACE group) or RFA (in TACE-RFA group)</i>				
1	14	20		
2	18	16	1.14	0.57
3	8	7		
<i>Deterioration in Child-Pugh Class</i>				
By 1 class (%)	17 (42.5)	8(18.6)*	4.54	0.04
By 2 classes (%)	2(5.0)	2(4.7)		
<i>Complication rate (%)</i>				
Subcapsular hematoma	8(20.0)	6(14.0)	0.20	0.66
Hemorrhage from incision	0	0		
Pleural effusion	2	1		
Skin burn	1	1		
Skin burn	0	0		
Ascites	3	3		
Acute upper gastrointestinal bleeding	1	0		
Cholecystitis	1	1		
<i>Recurrence rate (%)</i>	19(47.5)	18(41.9)	0.09	0.77



如何應用到此臨床個案上

Can this valid, important evidence be applied to your patient

- Were the study patients similar to the patient in my practice?
Yes but our patients tumor is bigger. (4.5)cm.
- Were all clinically important outcomes considered?
Yes
- Are the likely treatment benefits worth the potential harm and costs?
No
- Our patient can be included in this kind of therapy.

- Most of the important outcomes were all considered in this study.
- The summary of the present study suggests that the total QOL following TACE-RFA combination treatment was maintained at a relatively higher level than following TACE treatment alone in HCC patients. Therefore TACE followed by RFA appears to be more favorable than TACE alone with respect to QOL in HCC patient.



○ Thanks you