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	1986 Amalric		1990				
	190 가		5				
	, Kerin ¹¹⁾		156				

:
 가 60
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 Tel: 02) 3779-1192, Fax: 02) 783-0252, E-mail: cmcos@catholic.ac.kr
 * 2003, , 가

(Fig. 1C)

5

54 74 , 65 , .

1:4 , 2 , , (Fig. 1D), 3,000 Gy

10

4 , 1 , .

가 4 가 1 . 4 ,

3 (ray amputation),

1 , 1

(rub-

5 (Table). bery hard mass)가 3

(Fig. 1E)

1. 67 (Fig. 1A-F) 가 93 11

(Fig. 1F),

3 5 Kg 가

(Fig. 1A) 5 cm 48 15

(adenocarci

noma, stomach) (Fig. 1B). 2. 63 (Fig. 2A-2C)가 98 3

(breast cancer)

, 4 3

Billroth type II

가

T2N2M0 , (Fig. 2A),

7 6 FEP(5-fluorouracil, 가

Epirubicin, Cisplatin) (ray amputation)

40 (Fig. 2B),

(Fig. 1C) 가 (Fig. 2C).

가 6 3. 54 (Fig. 3A-B)가 86 1

Table. Five cases of metastatic hand tumor

	Age/Sex	Primary tumor	Meta. site	Treatment	Survival time
1	67/F	Stomach	multiple distal phalanges	Shoulder disarticulation	4 months
2	63/F	Breast	proximal phalanx	Ray Amputation	8 months
3	54/M	Lung	proximal phalanx	Conservative	4 months
4	74/F	Rectum	proximal phalanx	Ray Amputation	3 months
5	69/F	Lung	proximal phalanx	Ray Amputation	6 months

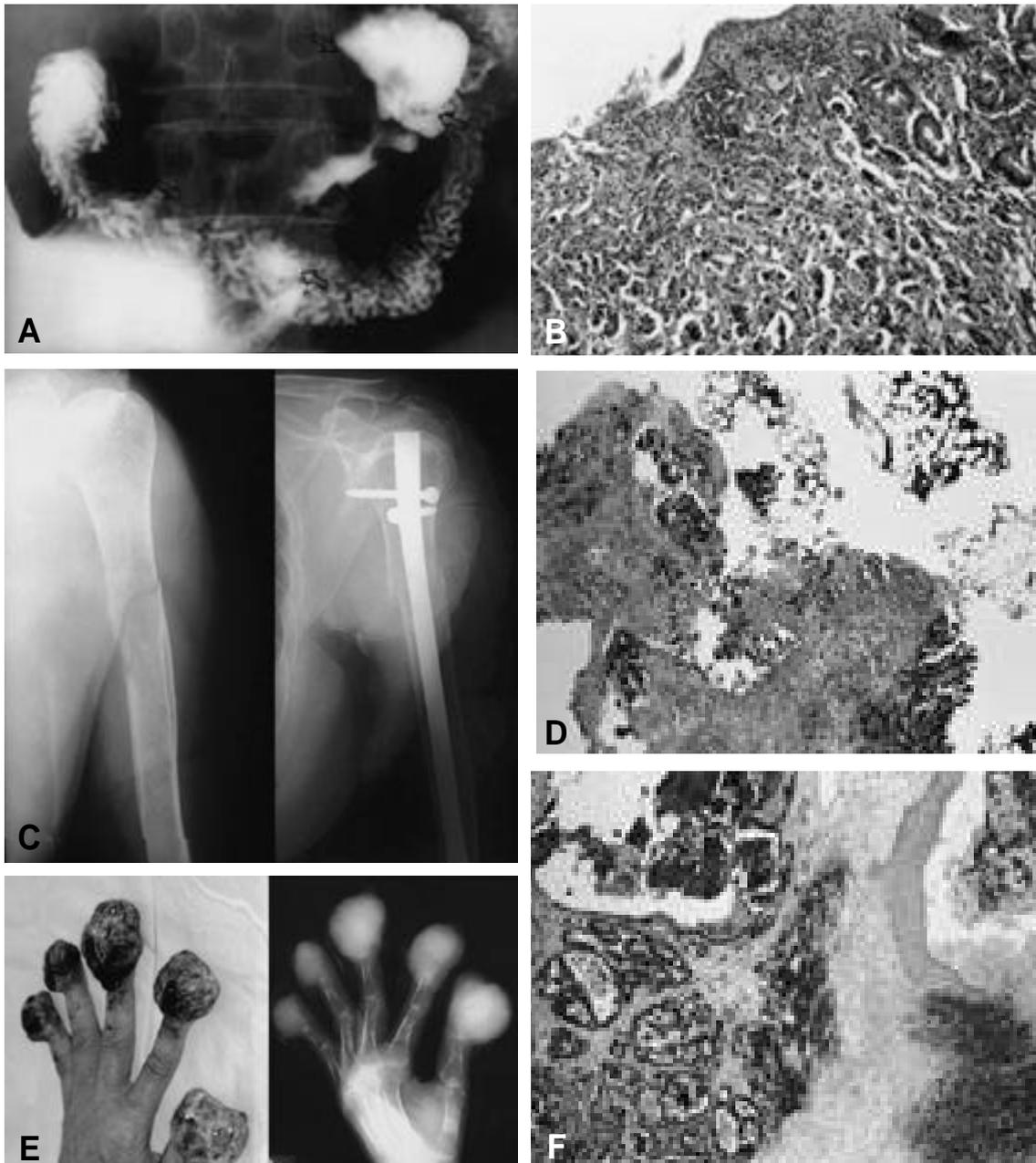


Fig. 1. A: Barium enema of the stomach shows a typical filling defect and mucosal erosions by stomach cancer.
 B: Photomicrograph of the resected stomach shows the normal gastric mucosa on stomach surface but the underlying invasion of adenocarcinoma in deep layer (H-E stain, $\times 40$).
 C: Simple Roentgenogram of the left humerus shows pathologic fracture at the shaft of humerus and treated it with closed intramedullary nail.
 D: Photomicrograph of the fracture site shows the normal bony structure and abnormal adenocarcinoma with glandular structure (H-E stain, $\times 40$).
 E: Clinical photography of the left hand shows the abnormal soft tissue masses and osteonecrotic changes on all finger tips, and also shows diffuse osteoporotic and osteonecrotic changes on all distal phalanges.
 F: Photomicrograph of the finger tip mass shows necrotic bone and soft tissue, and glandular structures of adenocarcinoma invasion (H-E stain, $\times 40$).



Fig. 2. **A:** Simple Roentgenogram of right index finger shows osteolytic bony destruction.
B: Clinical photograph of the amputated finger shows osteolytic cortical destruction of proximal phalanx.
C: Photomicrograph of the amputated finger shows abnormal glandular structures of breast cancer between the bony trabeculae (H-E stain, x 40).

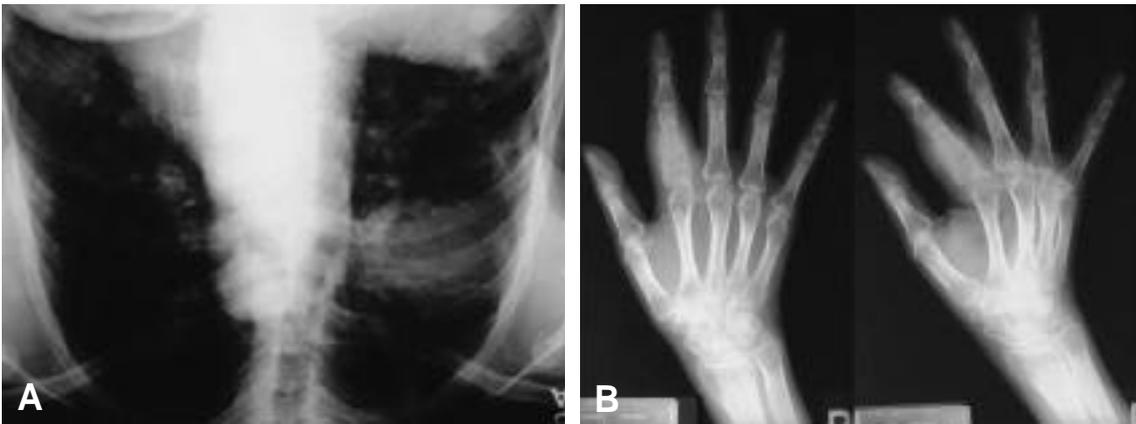


Fig. 3. **A:** Simple Roentgenogram of chest PA shows multiple radiopaque mass-like lesions of right lung.
B: Simple Roentgenogram of right hand shows bony destruction and swelling of soft tissue in second proximal phalanx.

(Fig. 3A) 13 , , , 21) , 0.007 0.3%
 가 , 20 , 5,8)

(Fig. 3B) , 0.1% 4,11) , 156 ,
 1983 Kerin¹¹⁾ 29 , 190 가 ,
 1986 Healey⁸⁾ 29 , 2)
 가 가
 30% 8,16) , 8,11)
 8) . 2

- 608-610, 1976.
- 19) **Rubin, P.L.**: The detection of occult metastatic cancer by radioactive bone scans. *J.A.M.A.*, 210: 1079-1969
- 20) **Sim FH**: Diagnosis and management of metastatic bone disease. 1st Ed. New York, Raven Press, 237-243, 1988
- 21) **Sim FH and Pritchard DJ**: Metastatic disease in the upper extremity. *Clin. Orthop.* 169:83-94, 1982
- 22) **Turek, S.L.**: Orthopaedic: Principle and their application. 4th Ed. pp. 666 Philadelphia, *J.B. Lippincott Co.*, 1984

Abstract

Metastatic Tumor in Hand

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Skeletal metastasis are common in terminal malignant tumor patients over 30% of incidence, but hand acrometastasis are very rare under 0.1% in terminal cancer patients. We have reported 5 cases of hand acrometastasis herewith the review of literatures. In the preterminal malignant tumor patients, sudden painful swelling on fingers and osteoporosis on X-rays are thought to be the earliest sign of hand metastasis.

Key Words: Metastatic tumor, Hand, Acrometastasis

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