

**A case of transient left ventricular ballooning
('Takotsubo'-shaped cardiomyopathy)
associated with subarachnoid hemorrhage**

April 15, 2005



- 64

- AM 1:00

가, 8:20 가

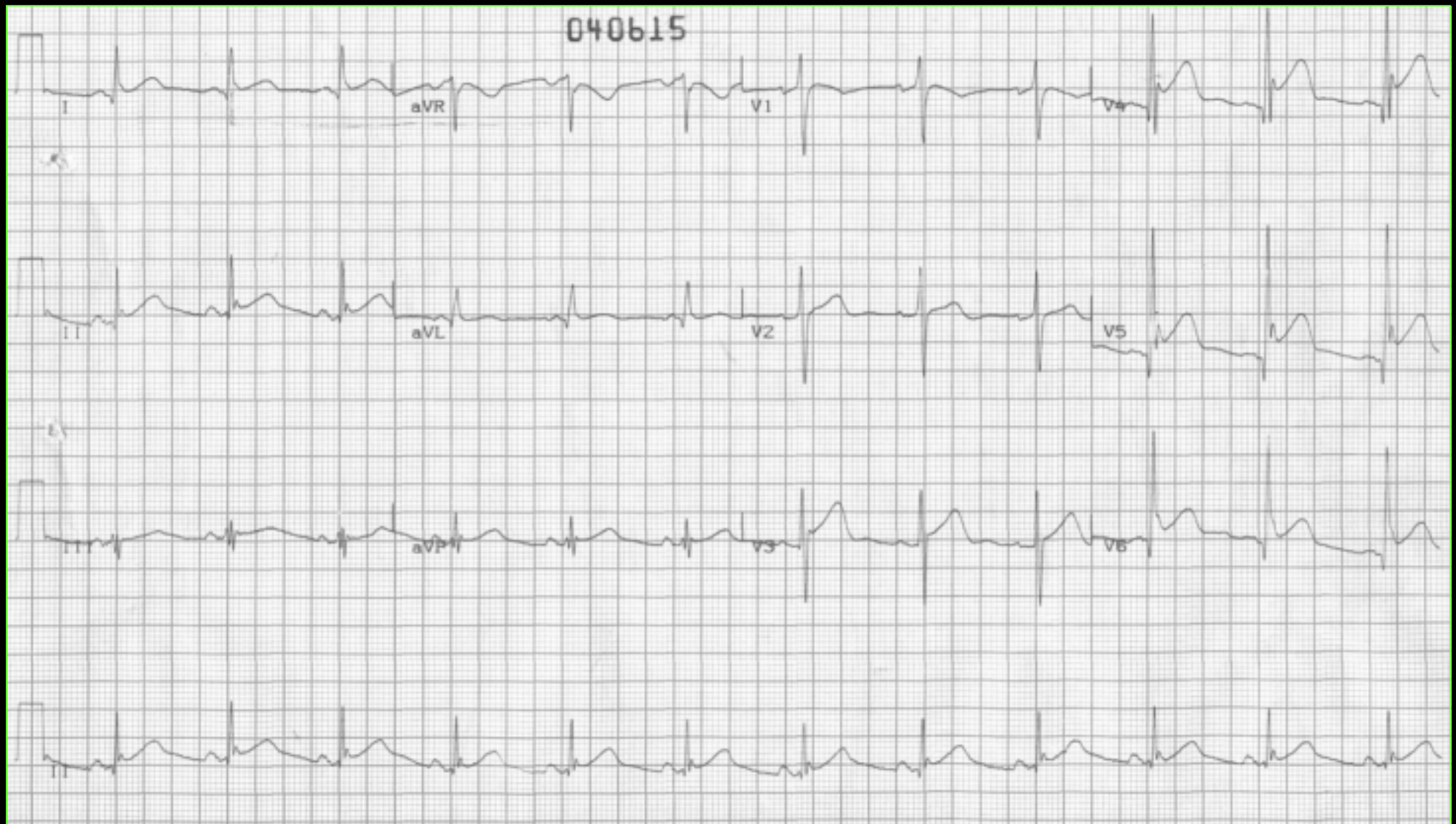
brief syncope ,

-) DM (+), Hypertension (+) ; 3

- Vital sign) 162 / 110 mmHg – 102 /min – 24 /min

- Troponin I 1.4 ng/ml, CK 84.5 IU/L, CK-MB 8.1 ng/ml,
GOT 41 IU/L, LDH 484 IU/L

ECG at ER



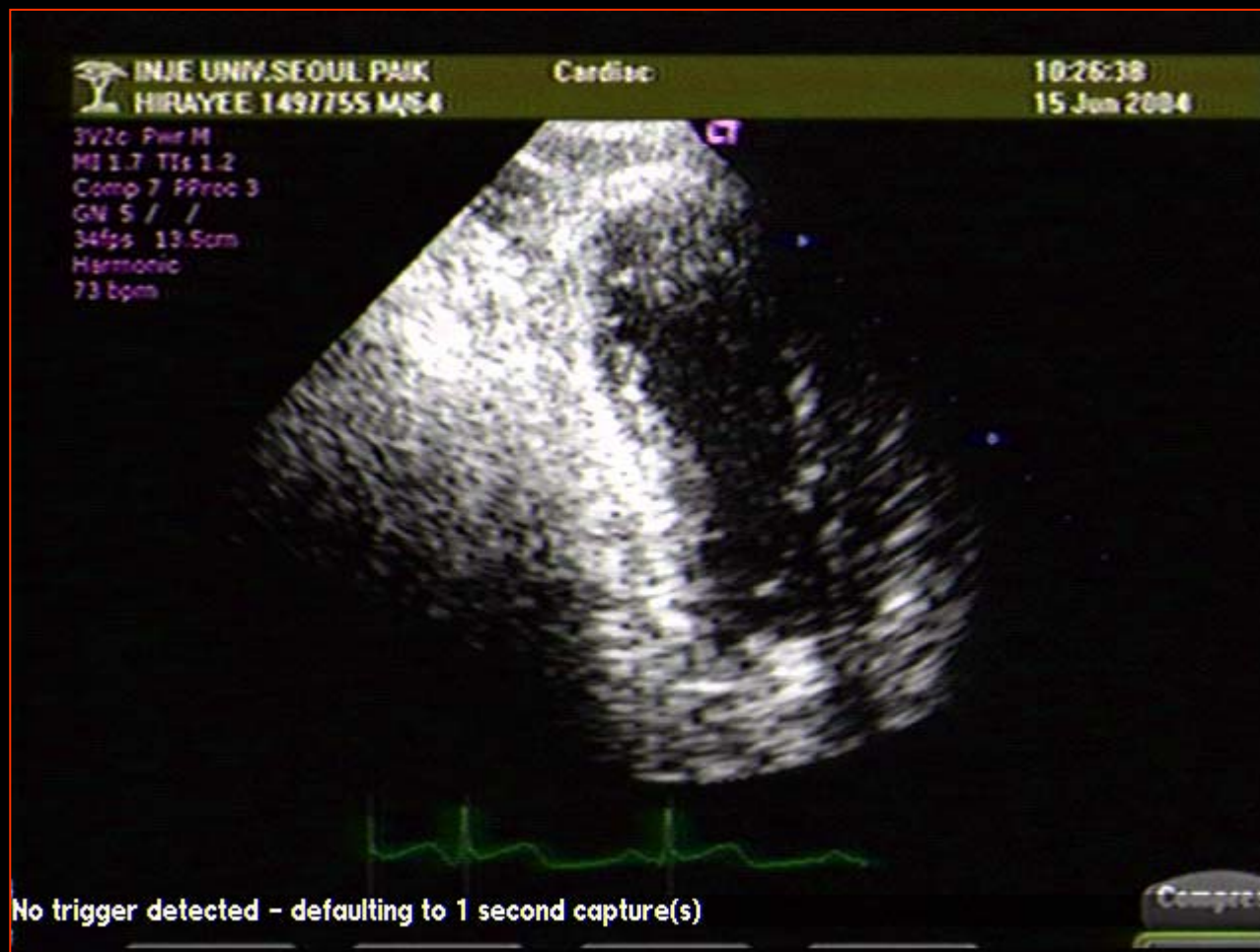
Echo at ER



Echo at ER



Echo at ER



CAG

HI. F.A.E. H/61 05-15
0.4 100 %
97705
0.114 0.15

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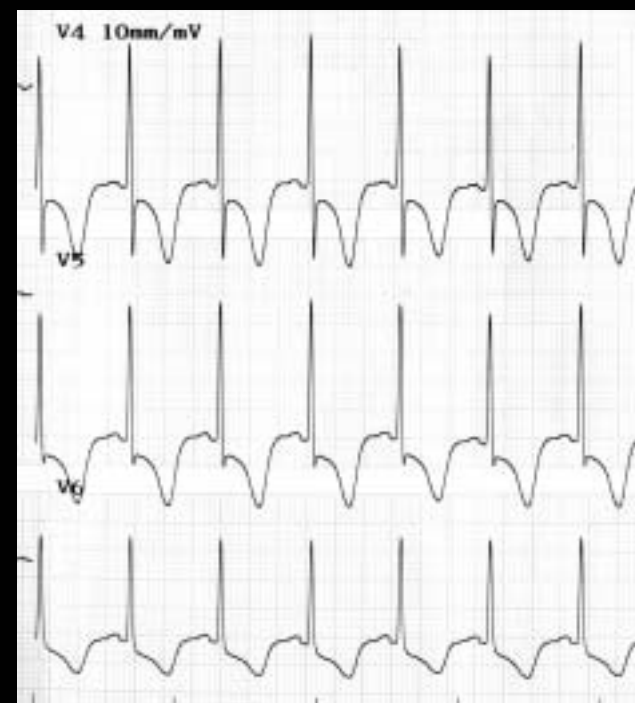
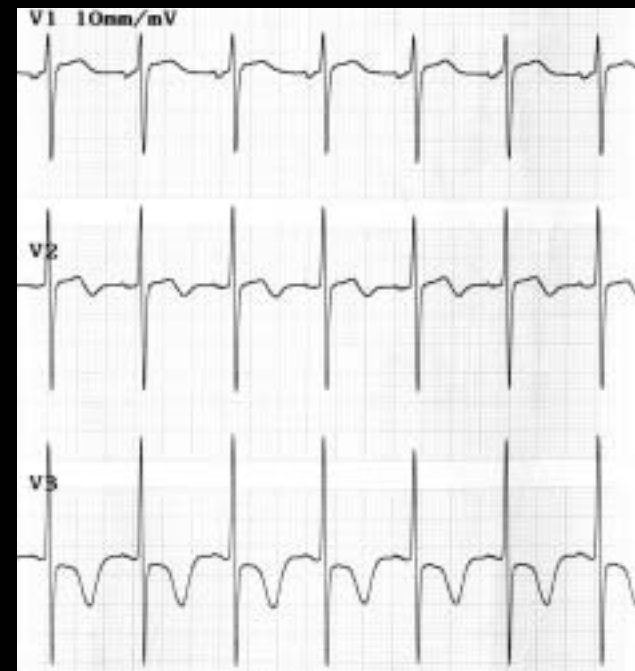
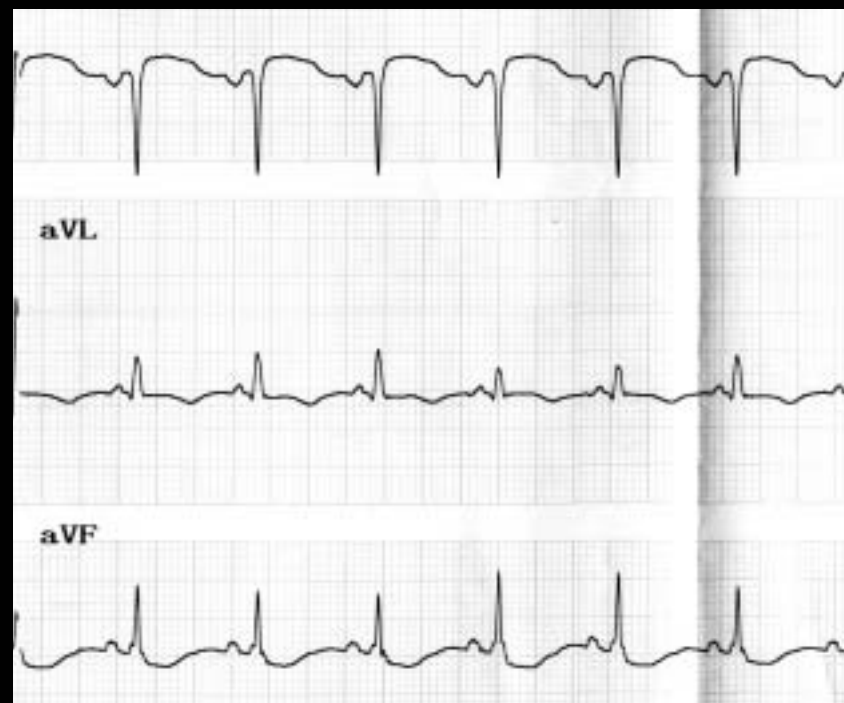
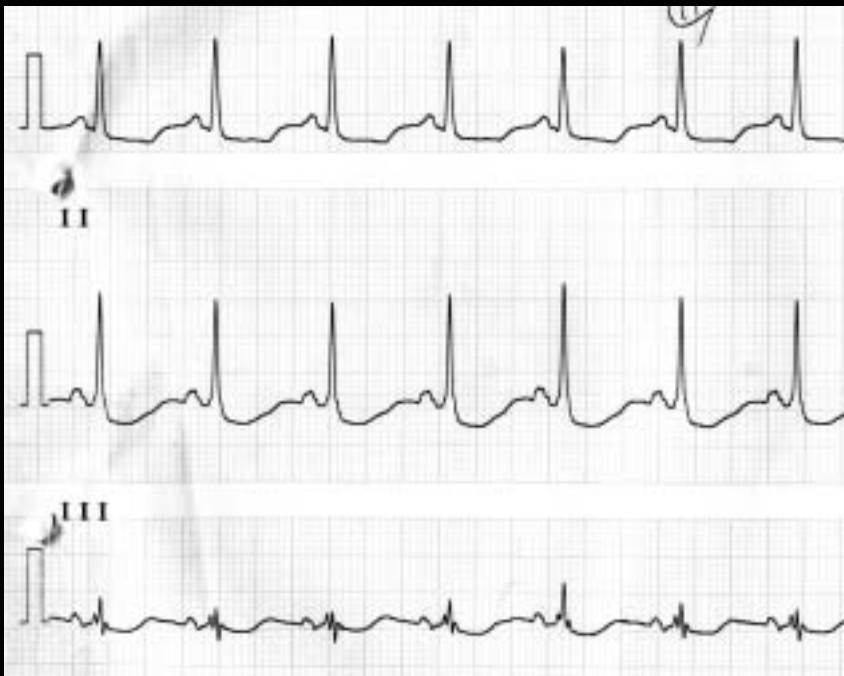
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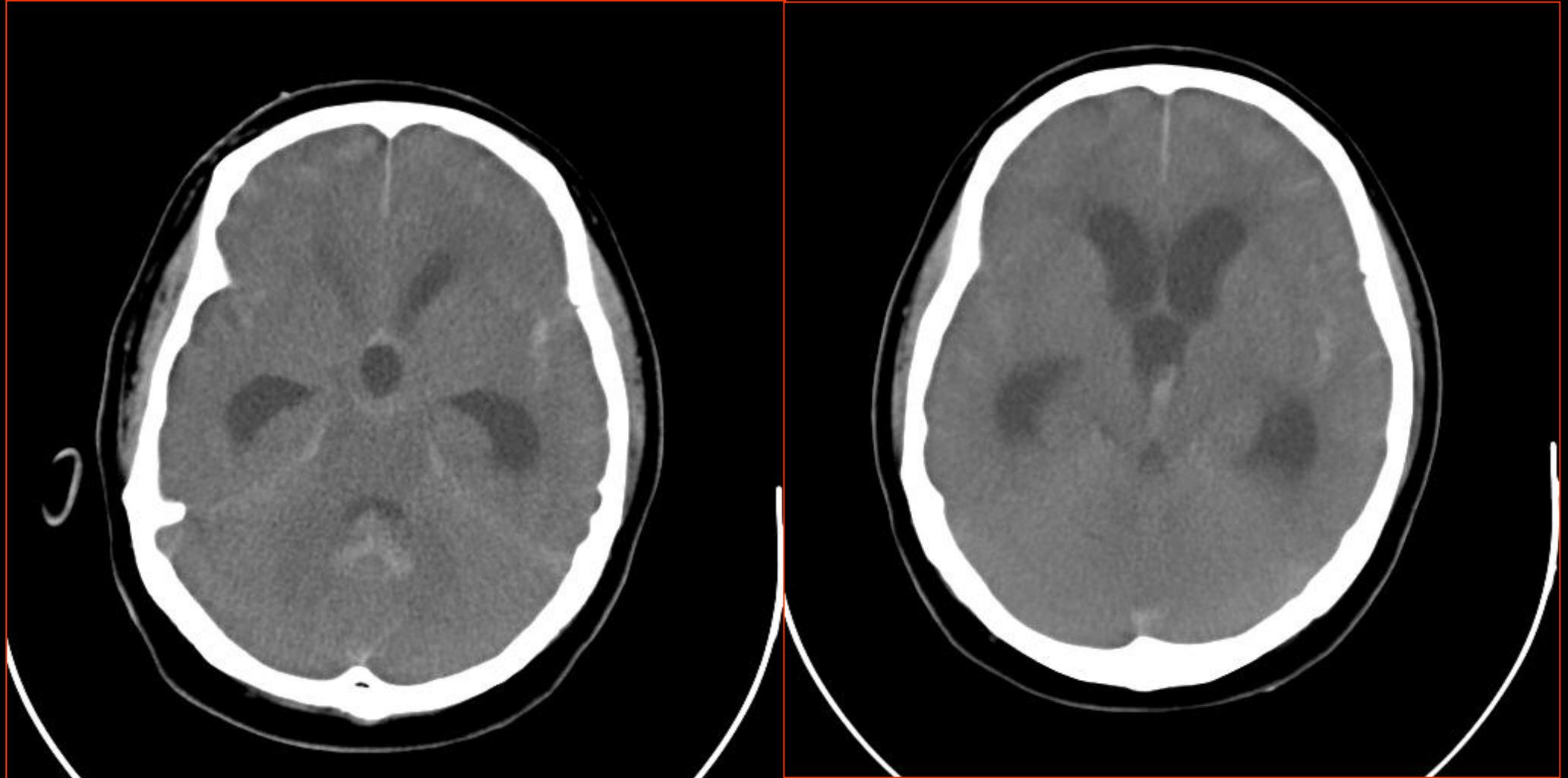
T-r.n: 10:00:01

T-r.n: 1.93

Ad #2



Brain CT



Left Vertebral Angio

HI.RA.E M/64 06-17
1940-01-02 M
1497755
2004-06-17

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ROT
24

ANG
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RUN
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31

MASK IMAGE

2 15

T-run: 14:26:29
T-mask: 0.33
T-image: 4.67

HI.RA.E M/64 06-17
1940-01-02 M
1497755
2004-06-17

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6X15 2D MATRIX

8
PHOTO
7

HI.RA.E M/64 06-17
1940-01-02 M
1497755
2004-06-17

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TFCA

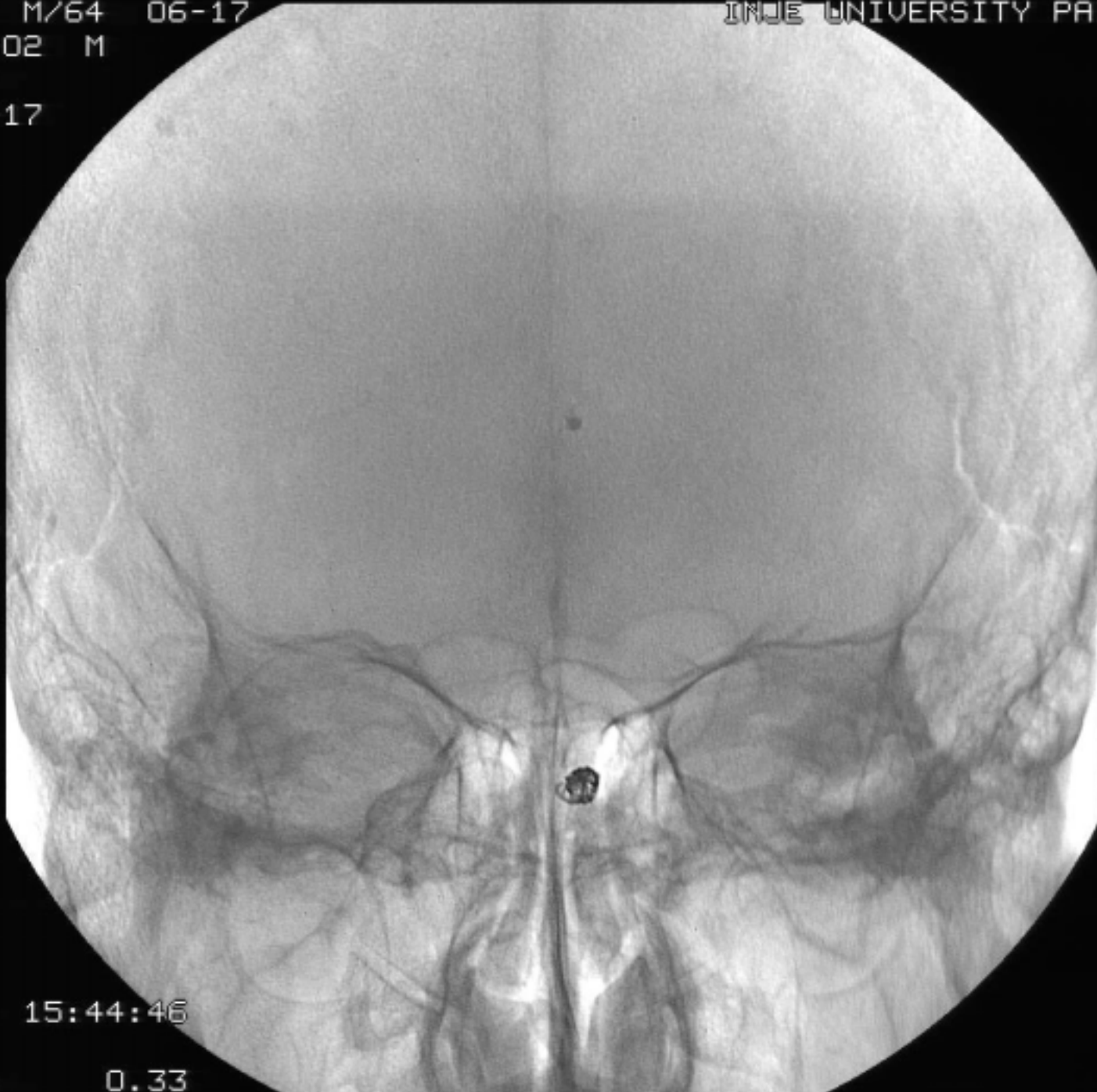
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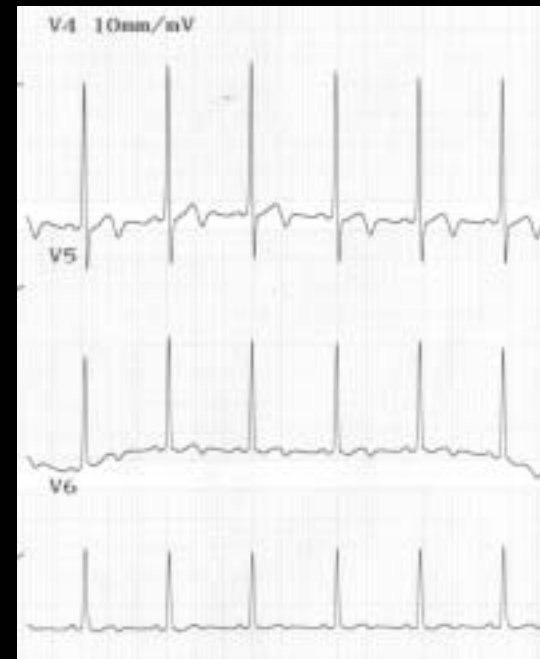
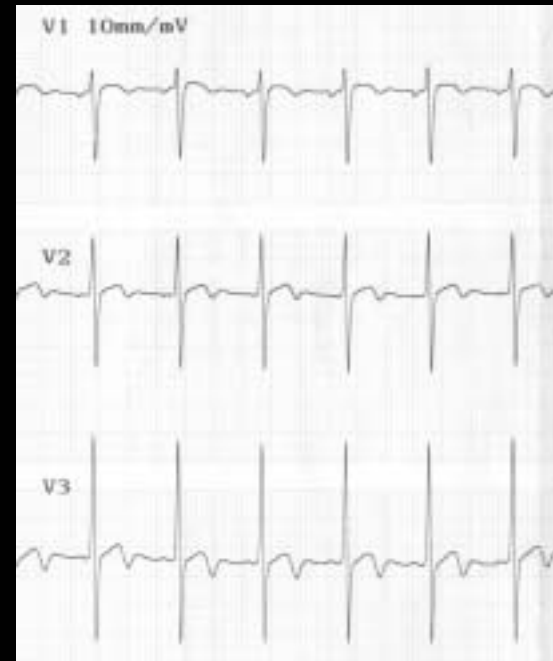
ANG
-26

T-run: 15:44:46
T-image: 0.33

RUN
14
32
IMAGE
2



Ad #7





Subarachnoid hemorrhage (SAH)

- Severe headache
- Nuchal rigidity
- Nausea
- Vomiting
- Alteration in Consciousness

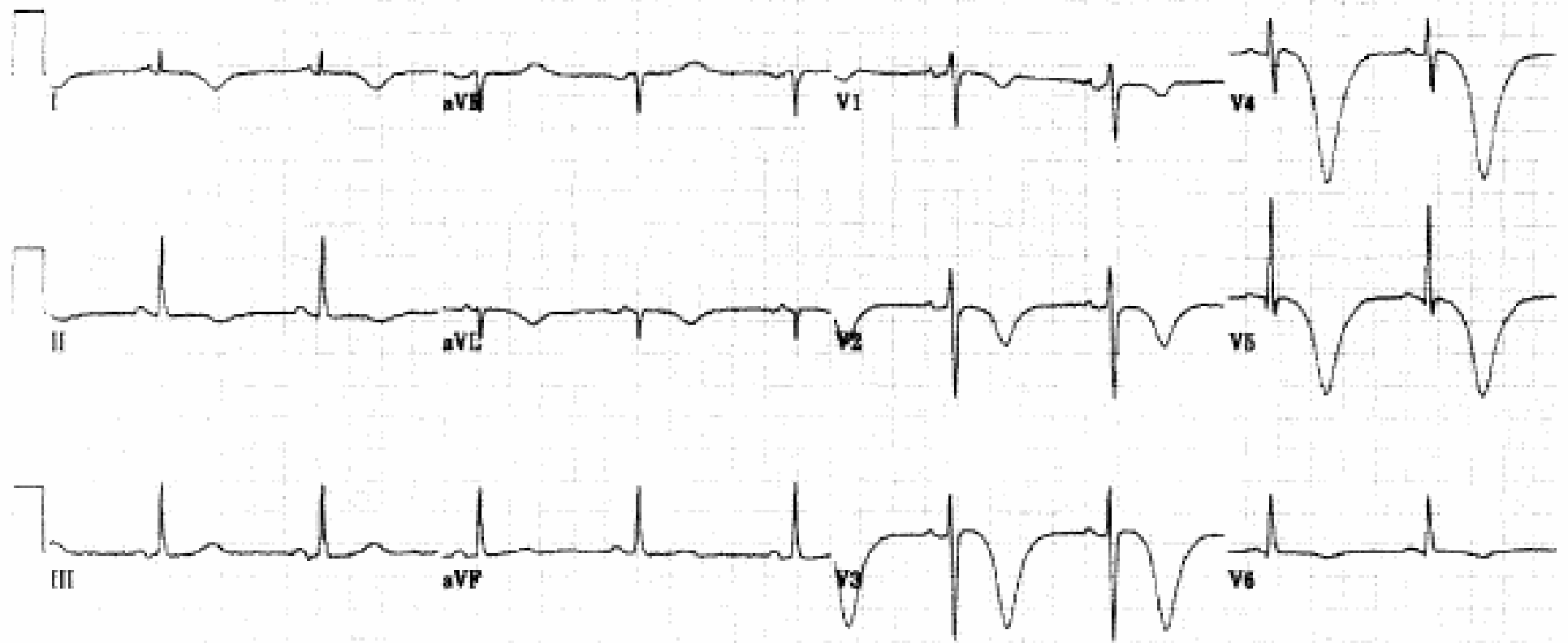
**Classic Clinical Signs
& Symptoms**

• **ECG Abnormalities**

50 – 100%

ECG changes in patients with SAH

- ST elevation / depression
- QT prolongation
- T inversion / peaked / flat
- Unspecified ST changes
- Unspecified T wave changes
- BBB
- Pathologic Q wave



- **LV dysfunction and frank myocardial infarction**
 - infrequently observed

Impaired LV contractility



Cardiac output ↓



↑ Risk of delayed Cerebral ischemia

Myocardial Infarction ?

Stunned myocardium ?

Reversible !

CASE REPORTS

Diagnosis of Subarachnoid Hemorrhage Indicated by Transthoracic Echocardiography

Jonathan Birns, MBBS, MRCP, Nikant Sabharwal, BM, BCh, MRCP, and
Roxy Senior, MD, DM, FRCP (Lond), FESC, FACC,
Harrow, United Kingdom

J Am Soc Echocardiogr 2003;16:995-8

