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# *Endovascular Treatment for Tuberculous Mycotic Aneurysm at Aortic bifurcation*

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Apinan Uthaisaisanwong M.D.

Department of Surgery

King Chulalongkorn Memorial Hospital



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## Disclosure

Speaker name:

Apinan Uthaisaisanwong MD.

I have the following potential conflicts of interest to report:

- Consulting
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)

I do not have any potential conflict of interest



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# Introduction



- Nowadays, EVAR is new trend for treatment mycotic aortic aneurysm.
- Almost of cases were bacterial cause.
- ***Mycobacterium tuberculosis*** is a rare cause of mycotic aneurysms.
- This study report the outcome of endovascular treatment of Tuberculous mycotic aneurysm combined Antituberculosis drug.



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# Case Presentation



A 70 year-old male presented with severe back pain and prolonged fever for 3 months.

## Underlying Disease

- Essential Hypertension
- Dyslipidemia
- Fully recovered stroke

## Physical Examination

- Fever
- No other significant findings



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# Investigation



- Mild leukocytosis
- Microscopic hematuria
- Elevated ESR 88 (0-15)  
CPR 96 (0-5)



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# X-ray



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The Thai Red Cross Society





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# CT Scan



**Urine PCR for TB was positive.**



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# Planning for treatment



- Antituberculosis regimens
  - Regimen Isoniazid Rifampicin  
Ethambutol Pyrazinamide
- Bifurcated EVAR
- Double J stent Lt kidney





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# Planing for EVAR





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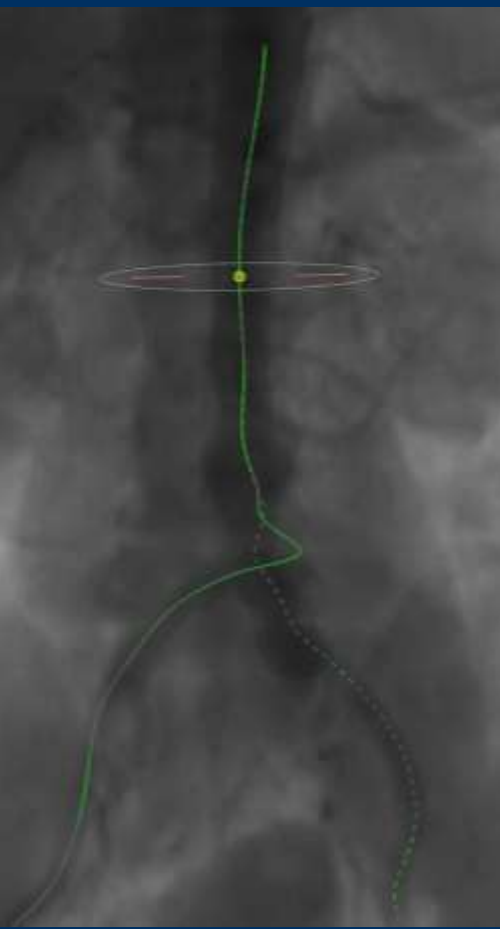
# Left Internal Iliac Artery Emboliation





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# Planing for EVAR



**20% Over sizing**



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# Postoperative Period



- **Final Aortogram**
  - **No endoleak**
  - **No immediate complication**
- **Stay one night in ICU**
- **Back pain was significantly improved.**
- **Discharge in 1 week later**



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# Post EVAR 1 week





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# CT scan follow up



**3 months**



**6 months**





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# Conclusion



- **Tuberculous mycotic aneurysm can be successfully treated by combined antituberculosis drug with endovascular treatment.**
- **Short term outcome was effective. However, long term follow up was needed.**



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# Acknowledgement



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King Chulalongkorn Memorial Hospital,  
Chulalongkorn University, Bangkok,  
Thailand





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Thank You



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Endovascular therapy  
For  
Infected Aortic Aneurysm  
In  
King Chulalongkorn Memorial Hospital  
Experience



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# Infected Aneurysm



- Number 12 cases (15%) from 82 cases since 2012 – 2016
- Mean age was  $68.6 \pm 13.7$  year-old
- Male were 83%.



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# Infected Aneurysm



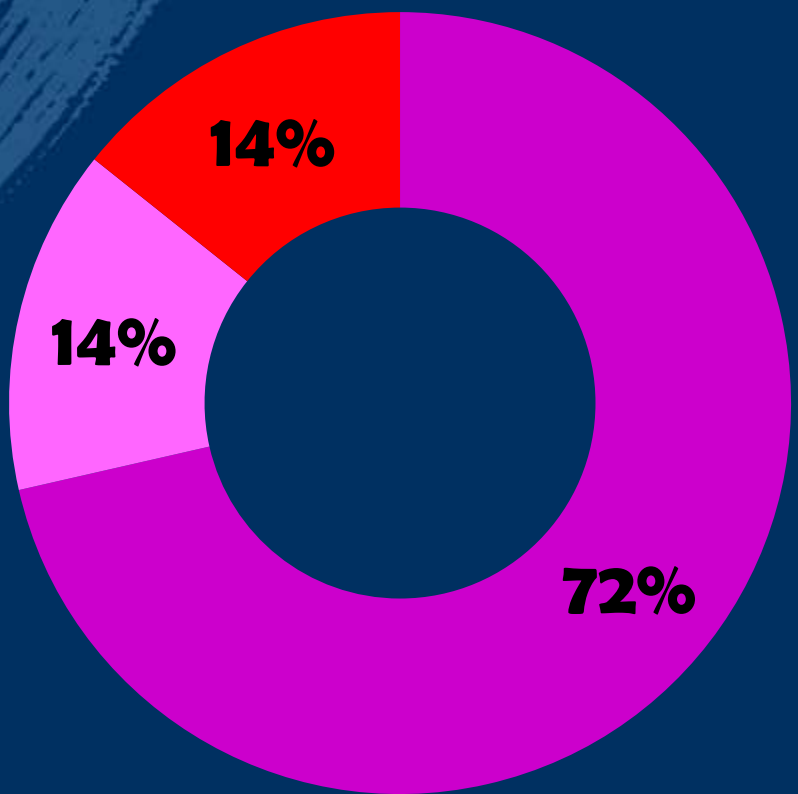
	Number (%)
<b>Abdominal/Back pain</b>	<b>12 (100)</b>
<b>Fever</b>	<b>9 (75)</b>
<b>Diarrhea</b>	<b>1 (8.3)</b>
<b>Arthritis</b>	<b>1 (8.3)</b>
<b>Mean leukocyte counts</b>	<b>10352 ± 3388 per ul (5410–18450)</b>



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# Pathogen Identification



- Salmonella species
- Staphylococcus aureus
- Mycobacterium tuberculosis



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# Mycotic Aneurysm



- Most mycotic aneurysms had saccular morphology.
- Thirty-day mortality was 1 case (8.3%).
- No postoperative requirement of explantation endovascular stent graft was occurred.



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