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주진영 1,2 , 조재영 2 , 임정환 1,2 , 조계중 2 , 채동렬 2 , 오인재 1,2 , 김규식 1,2 , 김유일 2 , 임성철 2 , 김영철 1,2 , 송상윤 1,3 , 나국주 1,3 , 김윤현 1,4 , 김재규 4

Two Cases of Fractured and Embolized Implanted Central Venous Chemoports in Lung Cancer

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Totally implanted central venous access devices for chemotherapy (chemoport) are being used increasingly in lung cancer patients. Vascular catheters are associated with various complications including infection, thrombosis as well as spontaneous fractures and embolization of the catheter, which is known as 'pinch-off syndrome'. 'Pinch-off syndrome' refers to the compression of a subclavian central venous catheter between the clavicle and first rib resulting in an intermittent or permanent obstruction, which can lead to tears, transection, or embolization. We report two cases of fractured and embolized implanted subclavian venous catheters in which the fragments were removed percutaneously. A 62-year-old man presented with back pain with a duration of a few weeks. The chest radiograph revealed complete transsection and embolization of the catheter into the right atrium. In addition, a 47-year-old woman with a chemoport had a grade 3 pinch-off sign in a chest radiograph demonstrating complete transsection and embolization of the catheter into the pulmonary artery. Both cases were managed by retrieving the embolized distal fragment percutaneously and removing the proximal section of the catheter. (*Tuberc Respir Dis 2007;63:449-453*)

Key Words: Chemoport, Pinch-off syndrome, Pinch-off sign

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2 서 론 (chemoport) 증 례 가 증례 1 화 자: 00 (주 소: 과거력 및 가족력: 사회력: 80 , 3 현병력: IIIA Address for correspondence: In Jae Oh, M.D. 1 1 6 Lung and Esophageal Cancer Clinic, Chonnam National University Medical School and Hwasun Hospital, 160, Ilsimri, Hwasun-gun, Jeonnam 519-809, Korea Phone: 82-61-379-7616, Fax: 82-61-379-7628 2 E-mail: droij@chonnam.ac.kr 5 2006 Received: Jul. 25, 2007

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JY Ju et al: Two cases of fractured and embolized implanted central venous chemoports

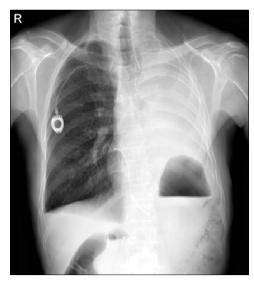


Figure 1. A chest PA illustrates the fractured catheter tip located between the right first rib and the mid-clavicle. The distal fragment is seen in the right atrium.

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36.3°C
 검사실 소견:
                     6,100/mm<sup>3</sup>,
                                       11.6 g/dl,
       35.8%,
                      254,000/mm<sup>3</sup>
                 514 mg/dl, FDP 7.1 ug/dl, D-dimer
0.61 mg/L
                      가
  방사선학적 소견:
                                                    1
      (Figure 1).
  임상 경과:
       가
        (Figure 2),
                 (Figure 3).
증례 2
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00(,47)

X-

과거력 및 가족력:

환 자:

주 소:

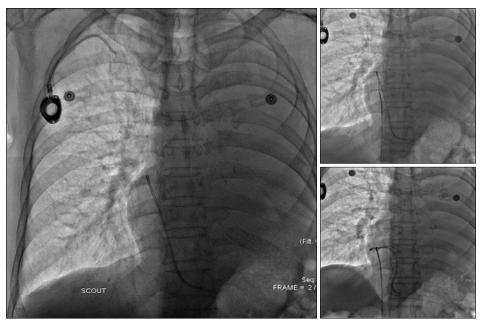


Figure 2. Inferior Vena Cavography shows a distal fractured fragment in the right atrial area (left). The right femoral vein was punctured and the fractured catheter was removed using a snare wire (right upper and lower).

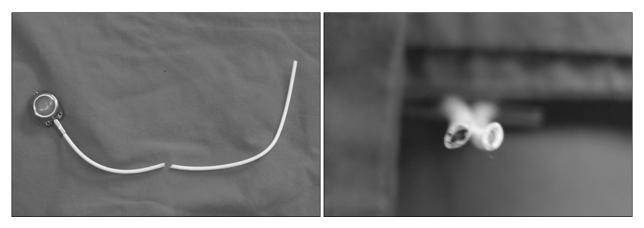


Figure 3. In a cross section, the configuration of the embolized portion of the catheter is not circular, but instead elliptical.

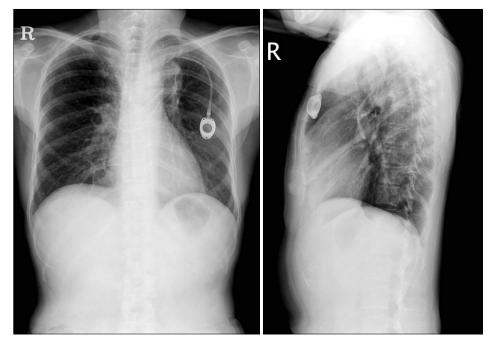


Figure 4. A chest PA and lateral films show the fractured chemoport catheter tip located between the left first rib and the mid-portion of the clavicle, and the distal fragment located in the main pulmonary artery.

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36.8°C
 사회력:
 현병력:
                      2005 8
                                               검사실 소견:
                                                                               4,700/mm<sup>3</sup>,
                                                                              305,000/mm<sup>3</sup>
                                                   9.3 g/dl, 29.9%,
                                etoposide
6
                       2007 4
                                               방사선학적 소견: X-
 이학적 소견:
                                 24
                       68 / ,
                                               가
          110/90 mmHg,
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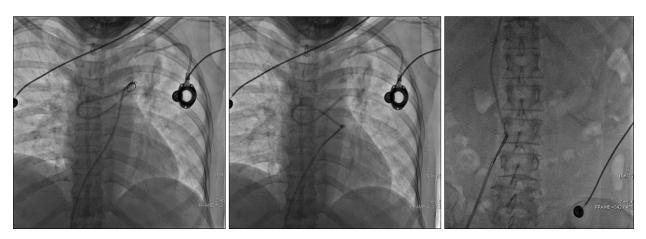


Figure 5. Removal of the distal fragment of the fractured catheter percutaneously. After the right femoral vein was punctured, the tip of the fractured chemoport was captured using a snare with a guiding catheter, and removed through the right femoral venous sheath.

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                 (Figure 4).
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  임상 경과:
                     가
              가
                                                          (pinch off syndrome)
                                                                                      . Hinke
                       (Figure 5).
                                                                  0,
                         찰
                                                             2,
                                                                                           3
                    고
                                                          . 2
                                                                                            (pinch off
                              0.1~1%
                                                    sign)
                                                                                                가
                      1,2
                                                                                        4,5
                                                                                가
                                                                                                  6,7
     1
                                                                  1
                                                                                       (pinch-off sign)
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가
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요

약

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