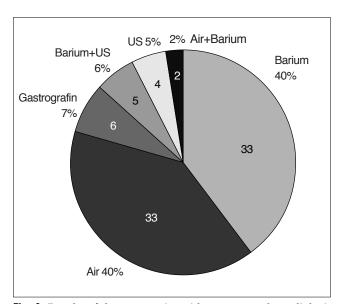
```
가
   :
                         , 6
                       가가 83 (: 54,
    : 91
         (47 )
    : 29)
                      (36 )
    5가 : 1)
                 ?; 4)
                                    가?; 5)
      가 가?
                       1993
                                    40% (33/83)
   : 1)
       가
                , (gastrografin)
                                        7% (6/
                                        가 6%
  83),
  (5/83),
                    5% (4/83),
               가 .
                               40%
         40%
         가
                                       , 1993
                      . 3) 30
                                   1 - 3
     (87%)
               , 33% (10/30)가
     57% (17/30)가
      3 - 5
                                       . 4)
             94% (78/83) , 31% (26/83)
             2 가 42% 가 , 1 가 30%, 3 가 23%, 4 가
   . 5)
  5% .
   :
                가 , 6
   가
               가
                                            가 .
 (1-3).
                                        , 6
      가
               (4 - 8).
              가
               (9 - 13). ,
                                        가 가
                          91
                                            83
                          : 54, : 29)
                                             (47)
                          (36)
                          5가 : 1)
                                             ?; 2)
2000 3 15 2000 9 26
```

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?; 3) 6 ?; 31% (26/83) . 5) 4) 가?; 5) 가 42% , 1 가 30%, 3 2 가 가? 1993 가 23%, 4 가 5% . 1993 가 가 42 : 23) (: 19, 1999 5가 1), 3) (1 - 3)., 1876 Hirschsprung 1) 83 가 가 40% (33/83) 가 (2, 3, 14 - 17).가 7% (6/83), (gastrografin) 1950 Ravitch McCune 가 가 6% (5/83), 5% (4/83), 가 가 2% (2/83) (Fig. 1959 Fiorito 1). 1993 (Fig. 2) 1960 62% 40% 5% 가 40% 가 (4 - 8).2) 82% (68/83) , 1993 1982 (11)(87%). 3) 30 2 가 가 1 - 3 57% (17/30)가 , 33% (10/30)가 10% (3/30)가 . 5 3-5 (9-13).



94% (78/83)

. 4)

Fig. 1. Results of the 1999 nationwide survey on the radiological reduction methods for intussusception are illustrated as a centesimal scale. Of 83 training hospitals, both air reduction and barium reduction were the most commonly used method, equally (40%, 33/83).

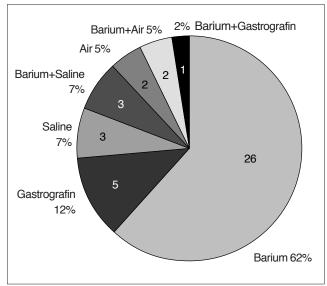


Fig. 2. Results of the 1993 survey in Seoul on the radiological reduction methods for intussusception are illustrated as a centesimal scale. Of 42 training hospitals, barium reduction (62%, 26/42) was the most commonly used method, while air reduction was used only in two hospitals (5%, 2/42).

Valsalva maneuver

```
가
                                                     (23).
                                               가 1993 1999 87% 82%
                                                6
     가
            , 6
                                                      0.14 - 2.8%
            가
                                            가
                                              (4, 7).
                                                                1-3
                      가
                                                 57%(17/30)가
                                                                            , 3-
                        Campbell (18) 40
                 . 1989
                                                  5
                           . 1991 Katz
 (17) 21
                           34.7%
                             . 1992
                                                1%
                                                                   (15).
Meyer (19)
               64
                                                                     94%(78/83)
           가
                                                31%(26/83)
                                               Jewell (20)
                                         1995
                              가
                                                                  11%
                                                         61%
      . 1995
                     (20)
                              76
              Jewell
                                                           가
                                                                 가
        (2, 5-8).
                                                                         2 가
                                         42% 가 , 1
                                                         가 30%, 3
                                                                  가 23%, 4 가 5%
                      1993
                              1999 6
                              가 ,
                  5%
                        40%
          62%
                40%
                                         (learning curve)
                                                                  , 가
(15, 21).
        (Fig. 1, 2).
         ,
가 ,
                                                                   , 1999
                                                           1993
            가
            2가
            1993
                                          가
                                                    가 가
                                    가
                                                                       가 가
                                                                      가
                                                                  가
                       가
                                                       가
                                                             , 6
                                                             가
    (22).
                    (17),
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Recent Trends of Radiological Reduction of Intussusception in Children: A Nationwide Phone Survey to Training Hospitals in Korea¹

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Purpose: To assess the prevalence of various radiological reduction methods for childhood intussusception in training hospitals by means of a nationwide phone survey, and to demonstrate recent trends in this area by comparing the findings with those obtained in a survey conducted six years earlier.

Materials and Methods: Forty-seven radiologists and 36 residents in 83 (university, 54; general, 29) of 91 nationwide training hospitals were asked by telephone 1) to identify their currently used radiological reduction method, and to state 2) whether sedation was used for patient preparation, 3) how many times they had experienced bowel perforation during the previous six years, 4) whether ultrasonography was used for diagnostic purposes and 5) the grade of resident involved in night duty. The results were compared with those obtained during a 1993 survey of training hospitals in Seoul.

Results: 1) Air and barium reduction were used with equal frequency (40%, 33/83). Gastrografin reduction was used in six, hospitals (7%) barium reduction and ultrasonography-guided hydrostatic reduction in five (6%), and ultrasonography-guided hydrostatic reduction in four (5%), while in two (2%), air and barium reduction were used to an equal extext. Compared with the results of the 1993 survey, the use of barium reduction had decreased from 62 to 40%, though the use of air reduction showed an increase, from 5 to 40%. The frequency with which other methods were used showed no significant change. 2) In 82% of cases (68/83), patients were not sedated during preparation; the 1993 figure of 87% was thus not significantly different. 3) With regard to the incidence of perforation during the last six years, between one and three cases had been encountered at each of 30 hospitals. Air reduction was used at 17 of these (57%), and barium reduction at ten (33%). At each of five hospitals at which 3 - 5 cases had occurred, air reduction had been used in all cases. 4) Ultrasonography was employed for the diagnosis of intussusception at 78/83 hospitals (94%); among these 83, this mode was always employed at 26 (31%). 5) At the majority of hospitals (42%), night duty residents were grade two, while grade one were employed at 30%, grade three at 23%, and grade four at 5%.

Conclusion: For radiological reduction air and barium are currently used with equal frequency at training hospitals in Korea. Compared with 1993, air reduction is being used more but barium reduction less.

Index words: Children, gastrointestinal tract
Interventional procedure, in infants and children
Intussusception

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