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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Publication | Year | Parity\* | Gestation diagnosis | Gestation dELIVERY | AgE | Presentation | Symptoms | Haematuria | Fever | Dysuria | WCC |  |
| Cohen (1) | 1968 | Multiparous | 37 | 38 | 35 | pain  |  Nausea/vomiting | yes |  -/- |  -/- |  -/- |  |
| Middleton (2)  | 1980 | Multiparous | 18 | 40 | 26 | acute right flank and RUQ pain  | Nausea/vomiting | yes |  -/- |  -/- |  -/- |  |
| Noe (3) | 1980 | Nulliparous | 40 | 40 | 20 | flank pain and Right upper quadrant pain | Fever | no |  -/- |  -/- |  -/- |  |
| Eaton (4) | 1981 | Nulliparous | 30 | 37 | 27 | bilateral flank pain | Nausea/vomiting | -/- | yes |  -/- | elevated |  |
| Maresca (5) | 1981 | Multiparous | 18 | 40 | 34 | right flank pain, severe  | Nausea/vomiting | no |  -/- |  -/- | normal |  |
| Kramer (6) | 1983 | Nulliparous | 30 | 40 | 18 | right flank pain, severe | Nausea/vomiting | no |  -/- |  -/- | normal |  |
| Dhabuwala (7) | 1984 |   | 28 | 40 | 19 | right flank pain | Nausea/vomiting | no | yes |  -/- | elevated |  |
| Meyers (8) | 1985 | Nulliparous | 27 | 28 | 18 | right flank pain and right lower abdominal pain with peritonism, severe |  | yes | no | no |  -/- |  |
| Oesterling (9) | 1988 | Nulliparous | 20 | 40 | 36 | right flank pain, Right lower abdominal pain | Nausea/vomiting | -/- |  -/- |  -/- |  -/- |  |
| Van Winter (10) | 1991 | Nulliparous | 34 | 37 | 20 | right flank pain | Nausea/vomiting | no |  -/- |  -/- | normal |  |
| Hamoud (11) | 1994 | Nulliparous | 37 | 37 | 29 | right flank pain, lower abdominal pain with peritonism |   | -/- | no | no | normal |  |
| Royburt (12) | 1994 | Multiparous | 33 | 36 | 29 | left flank pain |  | yes | no | no | elevated |  |
| Hwang (13) | 2000 | Multiparous | 28 |  -/- | 26 | right flank pain, severe |   | no |  -/- |  -/- |  -/- |  |
| Nabi (14) | 2001 | Unknown | 18 | 19 | 28 | right flank pain  |  |  |  -/- |  -/- | normal |  |
| Satoh (15) | 2002 | Nulliparous | 20 | 41 | 34 | right flank pain |   | no |  -/- |  -/- | normal |  |
| Jang (16) | 2006 | Unknown | 4w PP |  | 31 | right flank pain, severe |  | no |  -/- |  -/- |  -/- |  |
| Lang (17) | 2006 | Multiparous | -/- | -/- | 27 | bilateral flank pain  |   | yes | yes | yes | elevated |  |
| Lo (18) | 2007 | Nulliparous | 32 | 32 | 33 | left flank pain |  | no |  |  -/- | normal |  |
| Ushioda (19) | 2008 | Nulliparous | 21 | 39 | 27 | left flank pain, lower abdominal pain |   | no | no | no | normal |  |
| Sidra (20) | 2009 | Nulliparous | 34 | 34 | 28 | right flank pain  |  | no | no |  -/- |  -/- |  |
| Huang (21) | 2009 | Nulliparous | 19 | 25 | 27 | right flank pain, severe |   | -/- |   |  -/- |  -/- |  |
| Machado (22) | 2009 | Nulliparous | 31 | 34 | 20 | right flank pain, severe |  | -/- | yes | no |  -/- |  |
| Tang (23) | 2009 | Nulliparous | D5 PP | 37 | 31 | right flank pain |   | yes |  -/- |  -/- |  -/- |  |
| Matsubara (24) | 2010 | Nulliparous | 34 | 34 | 38 | left flank pain, back pain |  | yes |  -/- |  -/- |  -/- |  |
| Efrimescu (25) | 2013 | Nulliparous | 28 | 36 | 31 | left flank pain, severe |   | yes | no | no | elevated |  |
| Khandelwal (26) | 2013 | Unknown | 5w PP | - | 25 | left flank pain, severe |  | no |  -/- |  -/- |  -/- |  |
| Jalbani (27) | 2014 | Unknown | 5 | - | 22 | right sided abdominal pain  | Nausea/vomiting | -/- | yes | yes |  -/- |  |
| Kumar (28) | 2014 | Unknown | 5w PP | - | 25 | right flank pain  |  | no |  -/- |  -/- |  -/- |  |
| Upputalla (29) | 2014 | Nulliparous | 23 | 37 | 26 | right sided abdominal pain  |   | -/- | no | no | normal |  |
| Boekhorst (30) | 2015 | Multiparous | 34 | 37 | 27 | right sided abdominal pain  | Nausea/vomiting | no | no | no | elevated |  |
| Hanson (31) | 2015 | Nulliparous | 33 | 33 | 29 | right flank pain | Nausea/vomiting | no | no  |  -/- | elevated |  |
| Narashimhulu (32) | 2015 | Nulliparous | PP | - | 22 | left flank pain and contraction pain |  | yes | no | no | elevated |  |
| Patel (33)  | 2015 | Nulliparous | 38 | 38 | 24 | right flank pain | Nausea/vomiting | no |  -/- |  -/- |   |  |
| Fluke (34) | 2016 | Nulliparous | 30 | 38 | 21 | left flank pain  |  | -/- |  -/- |  -/- | elevated |  |
| Deshmukh (35) | 2016 | Unknown | 3w PP | 40 | 26 | right sided abdominal pain |   | -/- |  -/- |  -/- |  -/- |  |
| Traveiso (36) | 2018 | Nulliparous | 22 | 37 | 25 | right sided flank pain |  | no | no | no | normal |  |
| Chen (37) | 2019 | Nulliparous | 26 | 35 | 23 | left flank pain |   | yes | no | -/- | -/- |  |
| Verhaeghe (38) | 2019 | Multiparous | D1 PP | 41 | 26 | left abdominal and flank pain |  | -/- | yes | -/- | elevated |  |
| Rickard-Bell (39) | 2020 | Multiparous | D1 PP | 40 | 23 | right flank pain |  | no | yes | -/- | elevated |  |
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| --- | --- | --- | --- | --- | --- | --- |
| Publication | Previous claculi | prior renal disease | Initial Diagnosis via Ultrasound | Additional Imaging | treatment | Delivery Method |
| Cohen (1) | -/- | -/- | Not performed | Retrograde pyelogram | Nephrectomy, Laparotomy | Vaginal delivery |
| Middleton (2)  | no |  | ground glass appearance of right kidney | Retrograde pyelogram | Nephrostomy | Vaginal delivery |
| Noe (3) | no | no |  -/- | -/- | Conservative | Caesarean section  |
| Eaton (4) |   |  |  Results not reported |  | Nephrostomy  | Instrumental delivery |
| Maresca (5) | -/- | -/- |  -/- | Retrograde pyelogram | ureteric catheter | Vaginal delivery |
| Kramer (6) | -/- | -/- | hydronephrosis, urinoma | Retrograde pyelogram | Conservative | Vaginal delivery |
| Dhabuwala (7) | -/- | -/- | right hydronephrosis, urinoma | Retrograde pyelogram | Ureteric stent, Laparotomy | Vaginal delivery |
| Meyers (8) | no | -/- | retroperitoneal collection of fluid around right kidney accompanied by calicectasis | Retrograde pyelogram | Ureteric Stent |  -/- |
| Oesterling (9) |  -/- |   | hydronephrosis, urinoma | Retrograde pyelogram | ureteric catheter | Vaginal delivery |
| Van Winter (10) |  -/- | -/- | hydronephrosis, urinoma | Retrograde pyelogram | Ureteric Stent | Vaginal delivery |
| Hamoud (11) | no | no | hydronephrosis | -/- | ureteric catheter | Caesarean section  |
| Royburt (12) | -/- | -/- | bilateral mild hydroureter L>R, L perirenal urinoma and urine extravasation  | -/- | Conservative | Vaginal delivery |
| Hwang (13) | -/- | -/- | right hydronephrosis and hydroureter with perinephric fluid with extravasation of urine | -/- | ureteric catheter |   -/- |
| Nabi (14) | -/- | -/- | mild dilatation of right calices, renal pelvis, and proximal ureter (consistent with pregnancy) | -/- | Ureteric stent | Spontaneous miscarriage (19 weeks) |
| Satoh (15) | -/- | -/- | hydronephrotic right kidney with small preinephric collection. hydronephrotic left kidney: non-functioning | Retrograde pyelogram | Ureteric stent | Caesarean section  |
| Jang (16) | no | no | mild hydronephrosis | CT | Percutaneous Drain | Caesarean section  |
| Lang (17) | no | no | mild hydronephrosis | CT | Percutaneous Drain | Caesarean section  |
| Lo (18) | -/- | -/- | huge echo-poor collections around both kidneys | CT | Percutaneous Drain | Caesarean section  |
| Ushioda (19) | -/- | -/- | -/- | CT | Ureteric stent | Caesarean section  |
| Sidra (20) | no | no | hydronephrosis bilateral, hydroureter (performed after delivery) | -/- | Ureteric stent | Vaginal delivery |
| Huang (21) | -/- | -/- | mild bilateral hydronephrosis | Retrograde pyelogram | Ureteric Stent | Vaginal delivery |
| Machado (22) | -/- | -/- | hydronephrosis, hydroureter | -/- | Ureteric Stent |   -/- |
| Tang (23) | -/- | -/- | right perinephric fluid collection  | -/- | Ureteric stent |   -/- |
| Matsubara (24) | no | no | IUGR, mild right hydronephrosis  | Retrograde pyelogram | Ureteric stent | Caesarean section  |
| Efrimescu (25) | no | no | left renal hydronephrosis | -/- | Ureteric stent | Caesarean section  |
| Khandelwal (26) | -/- | -/- | bilateral hydronephrosis | -/- | Percutaneous drain | Instrumental delivery |
| Jalbani (27) | no | no | bilateral dilatation of renal collecting system | CT | Percutaneous Drain | Vaginal delivery |
| Kumar (28) | yes | -/- | echo-poor collection around the kidneys  | -/- | Ureteric stent |  -/- |
| Upputalla (29) | no | no | large perinephric collection with multiple stones in the renal pelvis  | CT | Percutaneous Drain | Vaginal delivery |
| Boekhorst (30) |  -/- | -/-  | echo-poor collection around the kidneys  | MRI | Nephrostomy | Vaginal delivery  |
| Hanson (31) | -/- | -/- | -/- | MRI | Ureteric stent | Vaginal delivery |
| Narashimhulu (32) | yes | -/- | slight bilateral dilation of upper urinary tract. appendix not seen. no kidney/gallbladder stones | MRI | Conservative | Vaginal delivery |
| Patel (33)  | no | no | mild left pelviectasis not out of proportion with normal pregnancy, small area of echogenicity ?stone | CT / Retrograde pyelogram | Ureteric stent | Vaginal delivery |
| Fluke (34) | no | no | normal | CT | Conservative | Caesarean section  |
| Deshmukh (35) | -/- | -/- |   -/- | Retrograde pyelogram | Ureteric Stent |   -/- |
| Traveiso (36) | -/- | -/- | mild right hydronephrosis | CT | Conservative | Vaginal delivery |
| Chen (37) | -/- | -/- | Right ureteric tapering | MRI only | Nephrostomy | Vaginal delivery |
| Verhaeghe (38) | -/- | -/- | Hydronephrosis and surrounding cyst | MRI | Nephrostomy | Caesarean section  |
| Rickard-Bell (39) | -/- | -/- | -/- | CT only | Ureteric stent | Instrumental delivery |

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