**Additional file 1 Review of ciliated hepatic foregut cysts previously reported in the English literature**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **n** | **Age/sex** | **Clinical presentation** | **Size (cm)** | **Location** | **Locularity** | **Treatment** | **Metaplastic epithelium** | **Cyto/Bx** | **Other** | **Tumor markersA** |
| **Khoddami 2013** | 2 | 3.5 yr/M | AP | 2.3 | S4 | Uni | Resection | N | N | Prenatal Dx (9 mo) | NR |
| 3.5 yr/M | Incidental | 3.5 | R lobe | Uni | Resection | Squamous | N | Mimicked hydatid cyst | NR |
| **Wilson 2013** | 1 | 34 yr/M | Incidental | 14 | S4, 5, 8 | NR | TACE, PVE, Resection | SCC | BBx | --- | WNL |
| **Ambe 2012** | 1 | 42 yr/M | AP | 7 | S4 | Uni | Resection | N | N | Contents with *Morganella morganni* | NR |
| **Fernández-Aceñero 2012** | 2 | 35/F | AP, dizziness | 7 | S4, 5 | Bi | Resection | N | N | --- | NR |
| 33/M | Incidental | 6.5 | S4 | Bi | Resection | N | N | --- | NR |
| **Yang 2012** | 1 | 65 yr/M | Incidental | 1.5 | S4 | Uni | Resection | N | N | --- | NR |
| **Fujita 2011** | 4 | 11 mo/F | AM | 19.3 | NR | Multi | Resection | N | N | --- | NR |
| 17 yr/F | Incidental | 6 | NR | Multi | Resection | N | N | --- | NR |
| 17 yr/F | AP | 6.4 | NR | Uni | Resection | N | N | --- | NR |
| 5 mo/M | AP, AD | 9.5 | NR | Multi | Resection | N | N | --- | NR |
| **Shimokawa 2011** | 1 | 41 yr/F | AP, AD, Fa | 7 | S4b | Multi | Resection | N | N | Mimicked hydatid cyst | NR |
| **Guérin 2010** | 4 | 11 mo/M | Incidental | 8.8 | S4, 5, 8 | Bi | Resection | N | N | Prenatal Dx (22 wks) | ↑AFP |
| 14 mo/F | Incidental | 5 | S5 | Bi | Resection | Squamous | N | Prenatal Dx (22 wks) | NR |
| 10 yr/M | Incidental | 2 | S3 | Bi | Resection | N | N | --- | NR |
| 10 yr/F | Incidental | 0.6 | S4 | Uni | Organ harvest | N | N | --- | NR |
| **Zaydfudim 2010** | 1 | 17 yr/F | AP, N/V | 6.5 | S4, 8 | Uni | Resection | N | BUS-Bx | --- | WNL |
| **Deshmukh 2009** | 1 | 2 yr/F | AM | 11 | R lobe | Multi | Resection | Squamous | N | --- | NR |
| **Goodman 2009** | 1 | 55 yr/M | Incidental | 2 | GB fundus | Uni | Resection | N | N | --- | NR |
| **Oida 2009** | 1 | 57 yr/F | NR | 4.4 | S4 | Uni | Resection | N | BFNA | --- | WNL |
| **Zhang 2009** | 1 | 60 yr/F | RUQ fullness | 7 | S4 | Multi | Resection | SCC | N | Absent smooth muscle layer | WNL |
| **Betalli 2008** | 1 | 14 mo/F | Incidental | 3 | S4 | Uni | Resection | N | N | Prenatal Dx (20 wks) | NR |
| **Geramizadeh 2008** | 1 | 25 yr/M | AP | 2.7 | S8 | Uni | Resection | N | N | Mimicked hydatid cyst | NR |
| **Kiyochi 2008** | 1 | 69 yr/F | Jaundice | 2.5 | S4 | Uni | Resection | N | N | --- | ↑CA19-9 |
| **Lubrano 2008** | 1 | 58 yr/M | Incidental | 1.9 | S4 | NR | Resection | Gastric | N | HCV, renal transplant | NR |
| **Shaw 2008** | 1 | 50 yr/F | AP | 8 | S5 | NR | Resection | N | N | --- | WNL |
| **Kaplan 2007** | 1 | 68 yr/M | AP, N/V, BM | 3 | S4 | Uni | Observation | N | BFNA, Bx | --- | ↑CA19-9 |
| **Young 2007** | 1 | 16 yr/F | AP, anorexia | 6 | R lobe, PH | Uni | Resection | N | BPQ-Cath | --- | NR |
| **Ben Mena 2006** | 1 | 31 yr/F | AP | 6 | S4 | Uni | Resection | Squamous | N | --- | WNL |
| **De 2006** | 1 | 70 yr/F | AP | 3.5 | S4 | Uni | Observation | N | BCT-FNA | --- | NR |
| **Kang 2006** | 1 | 56 yr/M | Incidental | 4.5 | S4 | Uni | Resection | N | N | --- | WNL |
| **Sato 2006** | 2 | 72 yr/M | Incidental | 1.1 | S4 | Uni | Autopsy | N | N | Absent smooth muscle layer | NR |
| 69 yr/M | AP | 2 | S4 | Uni | Resection | N | N | NR |
| **Straus 2006** | 1 | 63 yr/M | Incidental | 1.5 | S4a | NR | Resection | N | N | Concomitant RCC | NR |
| **Stringer 2006, Rogers 2007** | 1 | 9 mo/M | Incidental | 7 | S5, 8 | Uni | Resection | Squamous | PQ-Asp | Prenatal Dx (30 wks) | NR |
| **Fang 2005** | 1 | 30 yr/M | AP, Fa | 4 | S4 | Uni | Resection | N | N | --- | NR |
| **Kim 2005** | 1 | 3 yr/M | Incidental | 1 | R lobe | Webbed | Resection | N | N | Satellite cysts | NR |
| **Koletsa 2005** | 1 | 39 yr/F | AP, N | 6.4 | S5 | Multi | Resection | N | N | Communicated with GB & CD | WNL |
| **Rodriguez 2005** | 1 | 20 yr/F | AP | NR | GB fossa | NR | NR | N | N | --- | NR |
| **Cai 2004** | 1 | 30/M | AP | 6 | S4 | Uni | Resection | N | N | --- | WNL |
| **Jakowski 2004** | 1 | 42 yr/F | AP, N/V | 2.1 | S4b | Uni | Resection | N | N | --- | ↑CA19-9 |
| **Momin 2004** | 1 | 68 yr/F | Incidental | 3.8 | S4c | Uni | Resection | N | N | --- | NR |
| **del Poggio 2003** | 1 | 58 yr/F | Incidental | 2 | S4 | Uni | Observation | N | BFNA | --- | NR |
| **Horii 2003** | 1 | 47 yr/F | NR | 3.5 | S4 | Uni | Resection | N | FNA | --- | WNL |
| **Bogner 2002** | 1 | 55 yr/M | Incidental | 2.5 | R lobe | Uni | Autopsy | N | N | --- | NR |
| **de Lajarte-Thirouard 2002** | 1 | 40 yr/F | AP, thoracic pain, back pain | 13 | S5 | Uni | Resection | SCC, gastric/antral | N | --- | NR |
| **Furlanetto 2002** | 1 | 21 yr/M | AP, weight loss | 10 | S5, 6 | Multi | Resection, chemotherapy | SCC | US-FNA | --- | WNL |
| **Hirata 2001** | 1 | 53 yr/M | Incidental | 4 | S4 | Uni | Resection | N | US-FNA | HCV | NR |
| **Chatelain 2000** | 7 | 45 yr/M | Incidental | 3 | S4 | NR | Resection | N | N | --- | NR |
| 39 yr/F | Regurgitation | 4 | S4 | NR | Resection | N | N | --- | NR |
| 62 yr/M | Incidental | 2.5 | S4 | NR | Resection | N | N | --- | NR |
| 75 yr/F | AP | 3 | GB wall | NR | Resection | N | N | --- | NR |
| 47 yr/F | AP | 1.5 | S4 | NR | Resection | N | N | --- | NR |
| 51 yr/M | Incidental | 1 | S4 | NR | Resection | N | N | --- | NR |
| 43 yr/F | AP | 1 | S4 | NR | Resection | N | N | --- | NR |
| **Vick 1999**  **(*AJSP*)** | 6 | 14 yr/F | Jaundice | 6 | NR | Multi | Resection | N | N | --- | NR |
| 45 yr/M | Incidental | 3 | S4 | Uni | Resection | N | N | --- | NR |
| 48 yr/M | Incidental | NR | R lobe | Uni | Resection | N | N | --- | NR |
| 59 yr/F | Incidental | 3 | NR | Uni | Resection | N | N | --- | NR |
| 60 yr/F | Incidental | 1.1 | NR | Uni | Resection | N | N | --- | NR |
| 61 yr/M | Incidental | 2.5 | R lobe | Uni | Autopsy | N | N | --- | NR |
| **Vick 1999**  **(*Archives*)** | 1 | 51 yr/M | Incidental | 12 | R lobe | Uni | Resection | SCC | N | --- | NR |
| **Harty 1998** | 1 | 17 yr/F | AP, Fa | 8 | R lobe | Uni | Resection | Squamous | N | --- | NR |
| **Wu 1998** | 1 | 44 yr/F | AP | 5 | S4 | Bi | Resection | N | N | --- | ↑CA19-9 |
| **Carnicer 1996** | 1 | 5 yr/F | Incidental | 2 | PH | Uni | Observation | N | BUS-FNA | --- | NR |
| **Hornstein 1996** | 3 | 69 yr/M | Incidental | 3.5 | Anterior | Uni | Observation | N | BUS-FNA | --- | NR |
| 53 yr/F | Incidental | 3 | NR | NR | Observation | N | BCT-FNA | --- | NR |
| 38 yr/M | AP | 3.5 | R lobe | Uni | Resection | N | BUS-FNA | --- | NR |
| **Murakami 1996** | 1 | 63 yr/F | Incidental | 2.2 | Medial | Uni | Resection | N | CT-Bx | Background cirrhosis | ↑CA19-9, ↑CEA |
| **Shoenut 1994** | 2 | 76 yr/M | AP, Na | NR | S4 | NR | Observation | N | BCT-Bx | --- | NR |
| 82 yr/F | AP | NR | S4 | NR | Observation | N | BCT-Bx | --- | NR |
| **Zaman 1994** | 1 | 35 yr/F | Incidental | 3 | S4 | Uni | Observation | N | BCT-FNA | --- | NR |
| **Terada 1991** | 1 | 72 yr/F | NR | NR | NR | NR | NR | N | N | --- | NR |
| **Kadoya 1990, Terada 1990, Terada 1991** | 3 | 59 yr/F | Incidental | 4 | S4 | Uni | Resection | N | N | HBV | NR |
| 69 yr/M | R flank pain | 2.5 | S4 | Uni | Resection | N | N | --- | NR |
| 41 yr/M | Incidental | 3 | S4 | Uni | Resection | N | N | --- | NR |
| **Kimura 1990** | 1 | 67 yr/M | Incidental | 3.5 | L lobe | Uni | Resection | N | N | --- | NR |
| **Wheeler 1984** | 1 | 69 yr/M | Incidental | 2.5 | R lobe | Uni | Resection | N | N | --- | NR |
| **Dardik 1964** | 1 | 69 yr/F | AP | 9 | R lobe | Uni | Resection | N | N | --- | NR |
| **Dockerty 1956** | 4 | NR | NR | NR | NR | NR | NR | N | N | --- | NR |

ATumor marker serologies include CA19-9, CEA, and/or AFP.

BDiagnostic fine needle aspiration (FNA)/core biopsy procedure.

**Additional file 1 legend** AD = abdominal distension; AM = abdominal mass; AP = abdominal pain; Bi = bilocular; BM = loose stool; Bx = core biopsy; Catheter = catheter drainage; CD = cystic duct; CM = centimeter; CT = computed tomography; Cyto = cytology; Dx = diagnosis; F = female; Fa = fatigue/lethargy; FNA = fine needle aspiration; GB = gallbladder; HBV = hepatitis B virus; HCV = hepatitis C virus; L = left; LFT = liver function test; M = male; Mo = month(s); Multi = multilocular; N = no; Na = nausea; N/V = nausea/vomiting; NR = not reported; PH = porta hepatis; PQ-Asp = percutaneous aspiration; PQ-cath = percutaneous catheter drainage; PVE = portal vein embolization; R = right; S = segment (of liver); SCC = squamous cell carcinoma; TACE = transarterial chemoembolization; Uni = unilocular; US = ultrasound; WNL = within normal limits; Yr = year.