Nine patients were delivered by cesarean sections. One set of triplets delivered the first baby at 26 weeks, and the other two infants 8 days later. Another case of triplets started in labour at 36 weeks, all infants were in cephalic presentation and delivered vaginally. The third case of triplets went into preterm labour at 24 weeks and allowed to progress because of the expected poor outcome.

The perinatal mortality rate (PNMR) for this series of high fetal order multiple pregnancy was 81/1000 (5 times the total PNMR at the hospital for the same period).

This small series of high order multiple pregnancies highlights the fact that the liberal use of ovulation induction and assisted reproduction in the recent years are responsible for the majority of these cases (11 of 12 in our series). Ten sets have been delivered since 1988 while only two sets were delivered in the previous 7 years. It has been shown that 69% of all high order multiple pregnancies in Great Britain (triplets or more) were due to ovulation induction, GIFT and/or IVF.

In attempting to reduce the occurrence of the unwanted high order multiple pregnancies with our current practice of ovulation induction and assisted reproduction, it is recommended that no more than three oocytes should be transferred in any one cycle of GIFT and also not more than three embryos to be transferred at each IVF treatment cycle. It would be very useful if we could predict which stimulated cycle would result in a multiple pregnancy in order to abandon it. However, there is at present no satisfactory method that could be used to predict which superovulated cycle would result in a multiple pregnancy.

Therefore, infertile patients and clinicians must be aware that 25–30% of superovulation treated patients will unavoidably have multiple pregnancy. Every effort should be made to avoid the occurrence of such high order multifetal pregnancies because of their dismal outcome. More research is required to identify parameters of hyperstimulated cycles that predict multiple pregnancy.

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Agenesis of the Gall Bladder

Sir,

I read, with interest, the recent article by Dr Hage and his colleagues on agenesis of the gall bladder (Saudi Med J 1992; 13(2): 117–119).

We came across a case in a 70-year-old female who presented with right upper quadrant pain, fever and jaundice. Ultrasound showed a stone measuring 1 cm in the common bile duct (CBD) which was dilated together with the rest of the biliary tree. No gall bladder or cystic duct could be seen. Initial management comprised of antibiotics, vitamin K, lactulose, intravenous fluids, analgesia and insulin for her diabetes which was discovered on admission. A few days later she underwent surgery, meticulous dissection of the whole extra hepatic biliary tree including Kocherization of the duodenum and exploration of the CBD (after extraction of the stone) was carried out, but we failed to find the gall bladder or its duct. An arteriograph (AT) tube was inserted in the CBD and a cholangiogram was carried out 10 days later which confirmed the absence of the gall bladder and the cystic duct. The tube was removed 5 days later and the patient was followed up for 6 months with no problems.

Dr Hage and his colleagues, in their article, believe that repeated ultrasound and coeliac axis angiography can prove the diagnosis of agenesis without an operation. It was also noted that they did not perform cholangiography for their reported patient. Arteriography seems a promising method, at least for some cases which were opened and found to have a normal CBD, closed without any intraabdominal procedure, and postoperatively were cured. But one cannot apply it to all cases, for in agenesis there are biliary and non-biliary causes for right upper quadrant pain. Of the biliary causes there are CBD stones, and biliary dyskinesia (overactivity of the ampulla).

The non-biliary causes are many and include peptic ulcer disease, irritable bowel syndrome, pancreatitis, and many others.

Stones in the CBD occur in 25–50% of the cases of agenesis, and these patients will need either endoscopic procedure or open surgery, thus arteriography will not exclude surgery. Biliary dyskinesia (dilated CBD with no stones in it) is associated with agenesis. It is thought to be caused by overactivity of the ampulla of Vater which shows a significantly higher sphincter of Oddi resting pressure and increased retrograde propagation of phasic muscular contraction when compared with healthy volunteers. Exploration of the CBD with a sphincteric procedure such as sphincterotomy is needed in many of these cases.

The role of cholangiography, whether per- or postoperatively, for establishing the diagnosis of agenesis has been stressed and considered mandatory by the majority of reports. In one review in 1967, all reported cases were reviewed and based upon documented operative details and per- or post-operative cholangiography. Cases of agenesis were classified into 25 proven cases, 25 probable cases, 47 possible (insufficient data) cases and 16 questionable cases.

We therefore feel that arteriography has a limited role, and that cholangiography is an essential part of confirming the diagnosis of agenesis of the gall bladder.

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References
References


Possibly the existence of an ectopic obliterated gall bladder has not been ruled out in their case since neither an autopsy, nor an angiography was performed.

As we stated in the Discussion of our article, we believe repeated ultrasonography and angiography of the coeliac trunk may prove the diagnosis of agenesis only when combined with preoperative cholecystography and double-dose cholangiography. As was reported, we did perform repeated cholecystography for our patient.

I acknowledge the possible differential diagnoses that were suggested by Drs Ali Gharaibeh and Shrideh, most of which should not be operated upon as treatment of first choice. As to the role of cholangiography to establish the agenesis, I would like to stress again that this may be mandatory but will not suffice. In cases where there is an ectopic gall bladder with an occluded cystic duct, cholangiography may turn out to be unreliable. To prove the diagnosis it is necessary to rule out the typical gall bladder wall stain in the hepatogram phase of the coeliac angiography, or to perform an autopsy. Therefore, I do not agree with the conclusion that arteriography would only have a limited role. However, the importance of the cholangiography has never been denied by us; on the contrary!

Drs Ali Gharaibeh and Shrideh’s bringing further informative articles to our attention is much appreciated, since they increase our wealth of knowledge.

Sir,

I appreciate Drs Ali Gharaibeh and Shrideh’s comments and have reviewed the literature that they indicated. They present another patient with possible agenesis of the gall bladder.

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