

Letters to the Editor

Can Ear Lobe Thickness Be Used for Estimation of Gestational Age?

To the Editor: In recent years, there has been an increasing interest in the assessment of gestational age in the newborn infant and in differentiating the short-gestation from the small-for-date infant. There are various neurological and external criteria for the assessment of gestational age in the newborn infant. External criteria related to the ear are auricular length, auricular base length and auricular width.¹⁻³ However, there has been no previous study about the correlation between ear lobe thickness and gestational age in the literature according to our knowledge. The aim of this study, therefore, is to identify whether ear lobe thickness might be used in the assessment of gestational age in the postnatal period.

Ear lobe thickness was measured in 102 healthy newborn infants who were born in Erciyes University Faculty of Medicine, Department of Obstetrics. The measurement of the ear lobe thickness in millimeters was recorded by micrometer in the first three days of life. In addition, weight and length of the body and head circumference of the infants were determined. The measurements were recorded three times and the average values of measurements noted.

The gestational age of the infants was established with Dubowitz scoring system and the last date of menstruation of the infant's mother.

Of the 102 infants, 66 were male (64.7%) and 36 (35.3%) were female, with a M:F ratio of 1.8:1. Forty-nine infants (48.5%) were preterm, 48 (47%) were term, and five infants (4.5%) were post-term. The mean gestational age of the infants was 37.33±3.54 weeks (range 26 to 43 weeks). The mean weight of the infants was 2799±919 g (range 910 to 4750 g) and the mean length was 47.58±5.11 cm (range 33 to 56 cm). The mean head circumference of the infants was 33.22±3.47 cm (range 24 to 38 cm) and their mean ear lobe thickness was 3.00±0.74 mm (range

1.5 to 5.5 mm) (Table 1). In our study, there was significant correlation between ear lobe thickness and gestational age, length and weight of the body, and head circumference.

There are various neurological and external criteria for the assessment of gestational age in the newborn infant. Although some simplified methods were developed in the assessment of gestational age in the newborn infant, the application of most of these methods may be difficult and even impossible, especially in the case of the seriously ill infant.⁴

An external criteria is related to ear measurement. There are various studies about ear length and width measurements in the assessment of gestational age that are useful parameters in indicating intrauterine growth and chromosomal disorders.^{2,3,5-7} In all these studies, ear lobe thickness had not been measured because it was not possible to perform the measurement in the fetal period. In our study, we measured ear lobe thickness in the postnatal period and observed linear relationship between ear lobe thickness and gestational age. The method we used has proved to be a reliable technique for assessment of gestational age in the newborn infant. With practice the procedure can be performed in just a few seconds.

In conclusion, we considered that ear lobe thickness might be used in the assessment of gestational age of the newborn and fetus in the postnatal period and *in utero* as a simplified method. However, more studies should be performed about the correlation between ear measurements and gestational age.

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References

1. Dubowitz LMS, Dubowitz V, Goldberg C. Clinical assessment of gestational age in the newborn infant. *J Pediatr* 1970;77:1-10.
2. Shinohara H, Morisawa S, Nakatani T, Ohtani O. Measurements of the auricle in the human fetus. *Okajimas Folia Anat Jpn* 1991;68:215-8.
3. Birnholz JC, Farrell EE. Fetal ear length. *Pediatrics* 1988;81:555-8.
4. Tuncer M. A simple method for the estimation of gestational age. *Turk J Pediatr* 1978;20:71-6.
5. Shimizu T, Salvador L, Allanson J, Hughes-Benzie R, Nimrod C. Ultrasonographic measurements of fetal ear. *Obstet Gynecol* 1992;80:381-4.
6. Lettieri L, Rodis JF, Vintzileous AM, Feeny L, Ciarleglio L, Craffey A. Ear length in second-trimester aneuploid fetuses. *Obstet Gynecol* 1993;81:57-60.

TABLE 1. Summary of ear lobe thickness, gestational age, length and weight of the body, and head circumference.

Parameters	Mean±SD	r	t	P-value
Ear lobe thickness (mm)	3.00±0.74	0.739	10.97	<0.05
Gestational age (wk)	37.33±3.54			
Ear lobe thickness	3.00±0.74	0.779	12.46	<0.05
Length of body (cm)	47.58±5.11			
Ear lobe thickness	3.00±0.74	0.809	13.79	<0.05
Weight of body (g)	2799±919			
Ear lobe thickness	3.00±0.74	0.750	11.34	<0.05
Head circumference (cm)	33.22±3.47			

7. Awwad JT, Azar GB, Karam KS, Nicolaides KH. Ear length: a potential sonographic marker for Down syndrome. *Int J Gynecol Obstet* 1994;44:233-8.

Kikuchi Disease Presenting As Anemia

To the Editor: Kikuchi¹ and Fujimoto² independently reported the occurrence of necrotizing lymphadenopathy in 1972 from Japan. This benign disease usually presents with cervical lymphadenopathy in young females.³ Initial reports were confined to Japan, but subsequent cases were reported from the Indian subcontinent,⁴ the Middle East^{5,6} and from Europe.⁷ Cases presenting with pyrexia of unknown origin (PUO), as well as with splenomegaly⁹ were reported. We are reporting a case of Kikuchi disease presenting with anemia.

A 28-year-old Indian female presented at the medical outpatient's clinic of Najran General Hospital with a history of headache and giddiness. Clinical assessment and laboratory evaluation revealed a normocytic normochromic anemia. After thorough investigations, no cause for the anemia could be found. The patient was put on iron, B-complex and folic acid supplements, but without any improvement. Two months later, she returned to the ENT department with a history of swelling on the left side of the neck and low-grade fever of five days' duration. The patient had reportedly taken some antibiotics, without relief. Clinical examination revealed moderate pallor and a tender but nonerythematous swelling on the left side of the neck. There was no evidence of any inflammation on the head, neck, chest or arm. Systemic examination was normal. Investigations showed Hb 8.9 g/dL, TLC 7900, DLC polymorphs 62%, lymphocytes 30%, monocytes 5%, eosinophils and basophils 1% each, platelets 299, ESR 27 mm in the first hour, MCV 88 fL, MCHC 34, and Hct 30%. Peripheral smear showed nothing abnormal. Reticulocyte count was 1%. No spherocytes were seen, and sickling and osmotic fragility tests were normal. Indirect Coombs' test was negative. Hemoglobin electrophoresis test was normal. Estimation of haptoglobin and hemopexin level was not available in our laboratory. Serum bilirubin level was normal (12 µmol/L). Bone marrow was not done, as we did not think it was indicated.

FBS was 3.9 mmol/L, urea 1.3 mmol/L, creatinine 51.6 µmol/L, Na 139, K 5, bilirubin 12 µmol/L, ALT 45.2 U/L, AST 45 U/L, ALP 120 U/L. Mantoux test was negative and serological test for brucellosis and toxoplasmosis was negative. X-ray of the neck showed soft tissue swelling with no bony erosion or destruction. Thyroid function tests were normal. Serum iron was 11.8 µmol/L and TIBC 84.4 µmol/L. Chest x-ray, USG abdomen, urine and stool tests were all normal. Fine-needle aspiration cytology for gram staining and acid-fast bacilli were negative. ANA and anti-ds DNA were negative. The patient was put on broad-

spectrum antibiotics, with a diagnosis of acute lymphadenitis, but she showed no signs of improvement. After one week, excision biopsy of the lymph node was carried out. A necrotic material was found in the center of the lymph node and was sent for culture. Histopathological study revealed fragmentation of the lymph nodes, complete loss of follicular architecture, necrotizing process with scanty granulocytes and presence of plenty of phagocytic histiocytes. The overall features were consistent with subacute necrotizing lymphadenitis of Kikuchi and Fujimoto. Culture reports were negative for any pathogenic organisms. The patient was discharged on a combination of acetaminophen 500 mg thrice a day and diclofenac sodium 75 mg twice daily for a week, and her case was followed. Surgical removal of the lymph node and analgesic therapy alone was enough for her to respond well, and after six months, she has had no recurrence, and her hemoglobin was 12.8 g/dL without any further treatment.

Lymphadenitis of Kikuchi and Fujimoto is a self-limiting benign disease affecting young females, especially of the Indian subcontinent, but the disease is well-recognized in Saudi patients.^{5,10} Lymph nodes are enlarged and frequently tender, and commonly misdiagnosed as tuberculosis or lymphoma.⁵ Low-grade fever has been reported in 30%-50% of the cases.^{1,5} Weight loss, night sweats and mild splenomegaly are other manifestations of the disease. ESR is frequently raised but not reliable. Patients who presented with PUO and splenomegaly have been reported. Anemia has not been consistently reported with Kikuchi disease. Our patient was unique in that not only did she have anemia, but that she also presented with anemia two months before the actual lymphadenitis. We do not know the exact etiology of this but there is a possibility of some sort of inhibitory factors in the serum that suppress erythropoiesis. Granulocytopenia was one of the features of half of the cases reported by Ashraf.¹¹ Granulocytopenia precursor cells in the bone marrow were found to be reduced by a study of colony-forming units in cultures (CFU-C). The serum in these patients was said to be carrying an inhibitory factor which might cause granulocytopenia.

Patients were previously reported who presented with SLE-like histological picture¹² and others who later developed SLE. Transient appearance of various autoantibodies has also been reported.¹⁴ Kikuchi disease has been described in association with Yersinia,¹⁵ toxoplasmosis,¹⁶ Stills disease,¹⁷ and also with an overlap syndrome responding to steroids.¹⁸ Although Kikuchi disease is a benign self-limiting disease, a fatal case of Kikuchi because of myocardial infarction has been recorded.¹⁹

This disease should be considered in the differential diagnosis of all cervical lymphadenitis, especially in adult

females of the Indian subcontinent. Also, although the cervical region is the most common site for Kikuchi lymphadenopathy, involvement of other sites is by no means rare.^{3,14} Therefore, utmost care should be taken before labelling such patients as having tuberculosis or lymphoma. Biopsy should be taken in all such patients to establish the diagnosis and the histopathologist should be alerted for the possibility of this uncommon disease.

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References

1. Kikuchi M. Lymphadenitis showing focal reticulum cell hyperplasia with nuclear debris and phagocytes: a clinicopathological study. *Nippon Ketseki Gakkhi Zasshi* 1972;35:378-80.
2. Fujimoto Y, Korjiria Y, Yamaguchi K. Cervical subacute necrotizing lymphadenitis (Japanese). *Naika* 1972;30:920-7.
3. Abdulla AA, Afzal M, Fahad I, Giangreco AB. Kikuchi disease: a clinicopathological analysis of 13 cases from Riyadh Central Hospital. *Ann Saudi Med* 1995;15:288-90.
4. Suseelan AV, Augusty TS, Harilal KR. Necrotizing lymphadenitis: an analysis of 17 cases. *Ind J Surg Pathol* 1984;27:331-4.
5. Turner RR, Martin J, Dorfman RF. Necrotizing lymphadenitis: a study of 30 cases. *Am J Surg Pathol* 1983;7:115-23.
6. Khan Rauf A. Kikuchi's histiocytic necrotizing lymphadenitis. *Ann Saudi Med* 1990;10:460-4.
7. Pileri S, Kikuchi M, Helbron D, et al. Histiocytic necrotizing lymphadenitis without granulocytic infiltration. *Virchow's Arch* 1982;395:257-71.
8. Pearl D, Strachen JA. Kikuchi disease as a cause of PUO. *N Engl J Med* 1989;320:1147-8.
9. Ruduiki C, Kessler E, Zarfan M, et al. A case of FUO and splenomegaly. *Acta Hematol* 1988;79:99-102.
10. Al Dossary S, Rajamani R. Kikuchi Fujimoto disease: a clinicopathologic study of six cases in Riyadh, Saudi Arabia. *Ann Saudi Med* 1995;15:666-8.
11. Ashraf A. Physicians beware. Kikuchi's disease is here. *Pathology Newsletter* 1991;6.
12. Imamura M, Ueno H, Marsumura A, et al. A structural study of subacute necrotizing lymphadenitis. *Am J Path* 1982;107:292-9.
13. Litwin MD, Kikkhan B, Handerson BR, et al. Histiocytic necrotizing lymphadenitis in SLE. *Ann Rheum Dis* 1992;6:8095-7.
14. Nasu S, Sakai K, Ariyoshi T, et al. A case of histiocytic lymphadenitis with appearance of various antibodies. *Naika (Japanese)* 1983;52:825-9.
15. Fevee A, Lennet K, Stein H, et al. Immunocytochemistry and etiology of HNL: report of three instructive case. *Histopathology* 1983;7:825-9.
16. Kikuchi M, Yoshizumi T, Nakamura H. Necrotizing lymphadenitis: possible acute toxoplasmic infection. *Virchow Arch* 1977;376:247-53.
17. Ohta A, Matsumoto Y, Onta T, et al. Still's disease associated with necrotizing lymphadenitis (Kikuchi disease): report of three cases. *J Rheum* 1988;15:981-2.
18. Naddaf H, Al-Balla S, Al-Salmi H. Kikuchi disease associated with overlap syndrome responding to steroids. *Ann Saudi Med* 1994;14:415-6.
19. Chan JFC, Wong K-C, Ng C-S. A fatal case of multicentric HNL. *Cancer* 1989;63:1856-62.

Recognition and Treatment of Mental Disorders in Primary Health Care

To the Editor: We read with interest the recent editorial in the *Annals*,¹ about campaigns to combat psychological disorders in the community. This relevant paper presented an authoritative point of view about research in this area. However, we would like to add some comments, in particular, about the prevalence of mental disorders in the community and primary care, their recognition, and the impact of the recognition of mental illness on outcome and health care costs.

As stated by Al-Faris, and confirmed by relevant international studies, mental disorders have a high prevalence in the community² and in primary care,³ and are a cause of severe disability.⁴ Since the pioneering work of Goldberg and Huxley, it has been accepted that general practitioners play a very relevant role in the care of psychiatric patients. In this model,⁵ they demonstrated that the main factor affecting the treatment received by the patients is the illness recognition by primary care physicians. Goldberg and Huxley proposed a system based on five levels, beginning with the recognition by the patient of having an illness and ending with the psychiatric hospitalization. Among these five levels, there are four filters, the primary care physician recognition being the most restrictive one. This is the essential factor limiting the care of patients with mental disorders, while another filter, referral to the specialist, plays a limited role. Actually, primary care physicians see and treat the majority of patients with mental disorders.⁶

On the other hand, different studies indicate that general practitioners vary considerably in their ability to detect psychiatric illness and that, in general, they do not recognize a substantial proportion (about 50%) of the patients detected by questionnaires (such as the *General Health Questionnaire*) or by the psychiatrist using diagnostic interviews.⁷ Analyzing the barriers to recognition of the mental disorders in primary care, Tylee,⁸ Docherty⁹ and others have proposed that these barriers could be divided into factors related to the patient, to the doctor and barriers at the health system level. Physician-related barriers have been found to be the most important variables affecting the recognition of mental disorders in some recent studies,¹⁰ while in other works, factors related to the patient have been found to have a decisive impact.¹¹

The methods intended to improve the recognition and management of mental disorders have been focused on tools for assisting physicians and training programs. As have been demonstrated by Higgins in his review of the literature,⁷ most training programs have been shown to be

effective in improving the detection of mental illness by general practitioners. This review also indicates that physician educational programs are the best method for improving the recognition and treatment of mental illness in primary care. Nevertheless, the author concludes that to improve recognition may not lead to an improvement of the patient's suffering or to a significant diminution of the health care costs.

Despite the initial findings indicating that recognition leads to a better outcome,¹² Tiemens et al.¹³ have recently shown that the relationship between recognition of mental disorders and outcome is not clear. Reviewing studies of the two last decades, only three out of nine studies found a direct relationship between correct recognition and better outcome. In addition, an increased recognition can also produce a significant increase in the patient's use of health resources. These unexpected findings could be due to methodological problems and to the fact that recognition does not necessarily imply an adequate treatment. While the efforts to combat mental disorders in the community and primary care have shown inconclusive results, it is a promising area of research. Further studies will help us to understand the complex relationships between recognition of mental disorders, their treatment and outcome.

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References

- Al-Faris E. Towards a campaign to combat psychological disorders in the community. *Ann Saudi Med* 1998;18:205-7.
- Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch Gen Psychiatry* 1994;51:8-19.
- Goldberg DP, Lecrubier Y. Form and frequency of mental disorders across centres. In: Üstün TB, Sartorius N, editors. *Mental illness in general health care: an international study*. Chichester: Wiley, 1995.
- Murray CJL, Lopez AD. Global mortality, disability, and the contribution of risk factors: global burden of disease study. *Lancet* 1997;349:1436-42.
- Goldberg D, Huxley P. *Mental illness in the community: the pathway to psychiatric care*. London: Tavistock, 1980.
- Üstün TB, Gater R. Integrating mental health into primary care. *Curr Opin Psychiatry* 1994;7:173-80.
- Higgins ES. A review of unrecognized mental illness in primary care. *Arch Fam Med* 1994;3:908-17.
- Tylee A. The secondary prevention of depression. In: Kendrick T, Tylee A, Freeling P, editors. *The prevention of mental illness in primary care*. Cambridge: Cambridge University Press, 1996.
- Docherty JP. Barriers to the diagnosis of depression in primary care. *J Clin Psychiatry* 1997;58(Suppl 1):5-10.
- Girón M, Manjón-Arce P, Puerto-Barber J, Sánchez-García E, Gómez-Beneyto M. Clinical interview skills and identification of emotional disorders in primary care. *Am J Psychiatry* 1998;155:530-5.
- Vázquez-Barquero JL, García J, Artal J, Iglesias C, Montejo J, Herrán A, Dunn G. Mental health in primary care: an epidemiological study of morbidity and use of health resources. *Br J Psychiatry* 1997;170:529-35.
- Ormel J, van den Brink W, Koeter MVJ, Giel R, van der Mee KR, van de Willige G, Wilmink FW. Recognition, management and outcome of psychological disorders in primary care: a naturalistic follow-up study. *Psychol Med* 1990;20:909-23.
- Tiemens BG, Ormel J. The capricious relationship between recognition and outcome of mental illness in primary care. *Epidemiol Psichiatr Soc* 1996;5:160-3.

Reply

To the Editor: I would like to thank Dr. Herrán and Professor Vázquez-Barquero for their valuable and encouraging letter. They seem to have studied the model developed by Goldberg and Huxley in their book, "Mental Illness in the Community."¹ This model has proved to be very valuable in explaining the natural history of psychological illness. Research is needed to estimate the morbidity at each level and filter sizes in Saudi Arabia. The second filter of mental disease (MD) detection seems to be very narrow in Saudi Arabia, as was shown in one study, that more than 90% of probable cases identified by the "general health questionnaire" were missed.² This does not automatically reflect doctors' ignorance. Other organizational issues discussed in the editorial may play a role in the doctors' low identification index.

Whether there is an association between the recognition of MD and better outcome is a point that was rightly questioned by Dr. Herrán and Prof. Vázquez-Barquero. In spite of the fact that MDs are responsive to treatment,^{3,4} and that most interventions to improve PHC physicians' recognition and treatment of MD were shown to be successful,⁵ there was disagreement on the impact of such interventions on patients' suffering and symptoms (outcome).⁵ While initial studies⁶⁻⁸ supported the hypothesis of positive effect of treatment outcome, other studies⁹⁻¹¹ showed no significant difference.

There is more than one explanation for this controversy. Type II error is a possibility, particularly in small studies. The absence of a statistically significant difference should not necessarily rule out the existence of a real difference. Resorting to meta-analysis may show a significant difference that may not be apparent in individual small studies. Another explanation is selection bias. Magruder et al.¹¹ excluded patients with severe depression who are probably more likely to benefit from recognition and treatment. This may have contributed to the negative result. Additionally, most of the studies⁹⁻¹¹ that found no difference in outcome had similar design, in that the doctors were notified about patients' self-reported scales^{10,11} or a psychiatric consultation,⁹ rather than doctors discovering the MD on their own.

Roter and Hall¹² instructed PHC physicians to use communication techniques that increase the likelihood of patients divulging their emotional problems. They randomized 69 physicians to an 8-hour interviewing skills group or control group and followed up 652 patients from the practice for six months. The patients of physicians from the intervention group showed significantly greater improvement in their general health questionnaire scores after six months. The campaign for the defeat of depression using an educational program for all GPs on the island of Gotland in Sweden resulted in beneficial effects on the frequency of sick leave and in-patient care for depressive disorders and the frequency of suicide.¹³

As was indicated by Herrán and Vázquez-Barquero, most studies⁶⁻¹¹ that used the method of notification of physicians regarding scale results of patients with unrecognized MD did not support the hypothesis that improved recognition of MD leads to better outcome. On the other hand, the study in which the doctors were trained to recognize MD had a significant improvement in reducing patient suffering at six months.¹² It seems as if the doctors prefer to discover sick patients on their own rather than being notified by another person. A meta-analysis of the results of all the studies is urgently needed. A replication of the Roter and Hall study¹² needs to be conducted to confirm their findings.

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References

1. Goldberg D, Huxley P. Mental illness in the community: the pathway to psychiatric care. London: Tavistock, 1980.
2. Al-Faris E, Al-Subaie A, Khoja T, et al. Training primary health care physicians to recognise psychiatric illness. *Acta Psychiatr Scand* 1997;96:439-44.
3. Wright AF. Continuing to defeat depression. *Br J Gen Pract* 1995;45:170-1.
4. National Advisory Mental Health Council. Healthcare reform for Americans with severe mental illness: report of the National Advisory Mental Health Council. *Am J Psychiatr* 1993;150:1447-65.
5. Higgins ES. A review of unrecognised mental health illness in primary care. *Arch Fam Med* 1994;908-17.
6. Johnstone A, Goldberg D. Psychiatric screening in general practice: a controlled trial. *Lancet* 1976;1:605-8.
7. Zung WW, Magill M, Moore JT, George DT. Recognition and treatment of depression in a family medicine practice. *J Clin Psychiatry* 1983;44:3-6.
8. Ormel J, Van den Brink W, Koeter M, et al. Recognition, management and outcome of psychological disorders in primary care: a naturalistic follow-up study. *Psychol Med* 1990;20:909-23.
9. Katon W, Von KM, Lin E, et al. A randomized trial of psychiatric consultation with distressed high utilizers. *Gen Hosp Psychiatr* 1992;14:86-98.
10. Mathias SD, Fifer SK, Mazonson PD, Lubeck DP, Buesching DP, Patrick DL. Necessary but not sufficient: the effect of screening and

feedback on outcomes of primary care patients with untreated anxiety. *J Gen Intern Med* 1994;9:606-15.

11. Magruder HK, Zung WW, Feussner JR, Alling WC, Saunders WB, Stevens HA. Management of general medical patients with symptoms of depression. *Gen Hosp Psychiatry* 1989;11:201-7.
12. Roter D, Hall J. Recruitment and training of primary care physicians in interviewing skills to identify and address psychosocial distress. In: *The Primary Research Program: the Fifth Annual NIMH International Research Conference on Primary Care Mental Health Research – Concepts, Methods, and Obstacles*. Bethesda: National Institute of Mental Health, 1991.
13. Rutz W, Carlsson P, Von Knorring L, Walinder J. Cost benefit analysis on an education program for general practitioners by the Swedish Committee for the Prevention and Treatment of Depression. *Acta Psychiatr Scand* 1992;85:457-64.

Acute Hydrops of the Gallbladder in a 10-Year-Old Boy With Infectious Hepatitis

To the Editor: Acute hydrops of the gallbladder is an acute massive distension of the gallbladder in the absence of inflammation, cholelithiasis, choledocholithiasis, or congenital malformation of the biliary system. It is rare in the pediatric age group and because of this and the similarities of its clinical features to other more common surgical conditions, some children with acute hydrops have been operated on without preoperative diagnosis.¹ To prevent this, and since acute hydrops is a self-limiting disease in the majority of cases, awareness among treating physicians about this is of prime importance.

A 10-year-old male child was admitted to hospital in August 1998 because of vomiting of one week's duration, right upper quadrant pain of three days' duration and jaundice of two days. On examination, the patient was found to be jaundiced, dehydrated, in pain and afebrile. His temperature was 38°C. Abdominal examination revealed a visible and palpable tender swelling in the right upper quadrant. This swelling was consistent with an enlarged gallbladder. His investigations on admission showed total bilirubin of 4.1 mg/dL, direct bilirubin 2.7 mg/dL, ALT 31 IU/L, AST 1390 IU/L, ALP 563 IU/L, and LD 526 IU/L. His WBC was 19,900/mm³, Hb 13.1 g/dL, platelets 402,000, BUN 7 mg/dL, Na 135 mEq/L, K 41 mEq/L, CL 101 mEq/L, glucose 95 mg/dL, and amylase 50 IU/L. His calcium and phosphorus were normal. Abdominal ultrasound (Figure 1) showed marked hydrops of the gallbladder. The gallbladder wall was normal with no evidence of cholelithiasis or choledocholithiasis. Both extrahepatic and intrahepatic bile ducts were normal. The patient was treated with intravenous fluids and analgesics and given cephalexin and metronidazole antibiotics after obtaining a blood culture, which was subsequently negative. He was put under close observation and followed up by serial abdominal ultrasound and repeated blood investigations. His HbSAg was negative, but his HAVAg and HAV IgM were positive. He was diagnosed as infectious hepatitis A complicated by acute hydrops of the

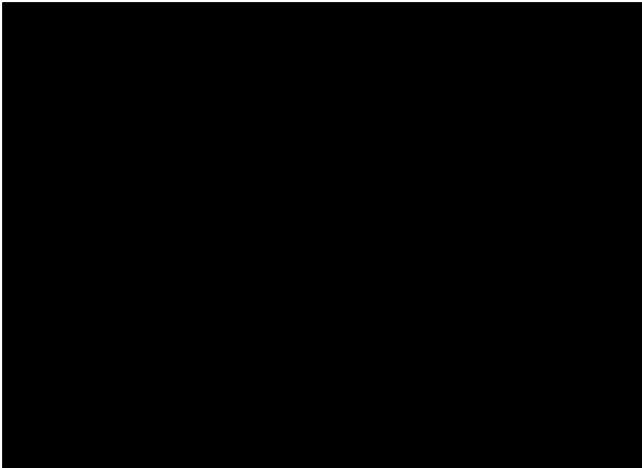


FIGURE 1. Abdominal ultrasound showing marked hydrops of the gallbladder.

gallbladder. He responded well to conservative treatment and was discharged home on the 10th day. On the day of discharge, his total bilirubin was only 1.2 mg/dL, ALT 79 IU/L, and ALP was 276 IU/L. Serial abdominal ultrasound showed a gradual decrease in the size of the gallbladder, and on the day of discharge, the gallbladder was normal in size.

The patient is now being followed up in the outpatient clinic, asymptomatic and well. A repeat abdominal ultrasound two months after his discharge showed a normal gallbladder.

Cholelithiasis is known to be common in children with hemolytic disease, but like other gallbladder diseases is uncommon in the pediatric age group. Recently, as a result of the liberal use of ultrasonography in the evaluation of children with abdominal pain, gallbladder diseases in children seem to be diagnosed with increasing frequency,² among these, acute hydrops of the gallbladder. In the past, acute hydrops of the gallbladder was considered a variant of acute acalculous cholecystitis, but in fact the two conditions are different pathologically and require different methods of treatment. In both conditions, there are no stones or sludge in the gallbladder, but in acute hydrops, the gallbladder is distended with white bile and mucus and no organisms on culture.³ In the past, because of its rarity and similarities of the clinical features to other more common acute surgical conditions, many children with acute hydrops of the gallbladder underwent surgery without preoperative diagnosis.^{1,4} Nowadays, abdominal ultrasonography is of great importance not only in establishing the diagnosis, but also on further follow-up of the progress of the disease. This ultrasonographic differentiation between acute hydrops of the gallbladder and acute acalculous cholecystitis is of prime importance. Although both conditions may resolve spontaneously, the

likelihood of surgical intervention is more in those with acute acalculous cholecystitis.

The exact cause of acute hydrops of the gallbladder is not known. The condition results from either an ineffective emptying of the gallbladder, or more likely due to a temporary self-limiting obstruction of the cystic duct.^{1,5} This temporary obstruction can be caused by enlarged lymph nodes adjacent to the cystic duct as a result of the lymphadenitis or reactive lymph node hyperplasia. This is supported by the frequent association of the acute hydrops with other illnesses, such as Kawasaki disease, sepsis, Henoch-Schönlein purpura, gastroenteritis, burn, polyarteritis nodosa, sickle cell disease, scarlet fever, hepatitis, familial Mediterranean fever, upper respiratory tract infection and leukemia.³ Among these, Kawasaki disease is the most common. A 2.9% incidence of acute hydrops of the gallbladder has been reported among those with Kawasaki disease.^{6,7}

Our patient had infective hepatitis A as a precipitating cause. In these patients, it is important to try to identify the precipitating cause. Treatment of the precipitating cause should obviate the need for surgical intervention in the majority of these patients.

The treatment of acute hydrops of the gallbladder is conservative, but because of the potential danger of gallbladder perforation as a result of distension and ischemic necrosis of the gallbladder wall, these patients must be kept under close observation. The management should be directed towards identifying and treating the precipitating cause. These children are frequently dehydrated and so should be resuscitated with intravenous fluids and electrolytes.⁵ In the majority the gallbladder will gradually shrink and decrease in size. Surgery should be reserved for complicated cases only and rarely for those not responding to conservative treatment with worsening signs and symptoms. In such patients, cholecystectomy with or without drainage is the treatment of choice. Our patient was treated conservatively and responded well. Such an approach is to be recommended unless the course of the disease becomes complicated.

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References

1. Rumley TO, Rodgers BM. Hydrops of gallbladder in children. *J Pediatr Surg* 1983;18:138-40.

2. Crankson S, Nazer H, Jacobsson B. Acute hydrops of the gallbladder in childhood. *Eur J Pediatr* 1992;151:318-20.
3. Molander ML, Bergdahl S. Gallbladder disease: primary cholelithiasis or gallbladder hydrops? Review of 32 children. *Pediatr Surg* 1992;7:328-31.
4. Rauch AM. Kawasaki syndrome: critical review of US epidemiology. In: Shulman ST, editor. *Kawasaki disease. Proceedings of the 2nd International Kawasaki Disease Symposium*. New York: Alan R. Liss Inc, 1986:33-44.
5. Chamberlain JW, Hight DW. Acute hydrops of the gallbladder in childhood. *Surgery* 1970;68:899-905.
6. Bloom RA, Swain VAJ. Non-calculous distension of the gallbladder in childhood. *Arch Dis Child* 1996;41:503-8.
7. Ternberg LJ, Keating JP. Acute calculous cholecystitis. Complication of other illnesses in childhood. *Arch Surg* 1975;110:543-7.

Cancer Patients' Awareness of Their Disease and Prognosis

To the Editor: The study by Dr. Ahwal¹ deserves more commendation, as it is, to my knowledge, the first study in our region on views of patients and lay people towards sharing medical information with doctors. This study deals with the ethical dilemma that doctors frequently face, i.e., how much information should they provide to (or keep from) their patients, especially those who are seriously ill, and whether to tell the family instead of the patient. This question is more relevant today with the increasing abundance of aggressive therapies and heroic interventions.

Telling the truth is considered one of the basic ethical principles and so doctors should not hide any important information from the patient if he or she is competent. Exceptional situations occur, such as when it is believed that significant psychological harm may result, or when the patient delegates his care and decisions to another person or a doctor. Revealing information is necessary, as a number of important decisions may have to be made in consequence of this information. Many studies in Western societies show that the majority of patients and people want to know, and that rarely does harm result from such discussions. In Arabic societies, only a few studies have been done thus far. A previous study in three cities in Saudi Arabia showed that most physicians were not good at communicating information about serious illnesses and that if they talked, they preferred to talk with the family rather than the patient.²

It is imperative that doctors communicate with patients in a gentle, humane and wise manner, since as mentioned,

not only do important medical decisions have to be made, but also social ones (such as performing Hajj or Omrah, or settling financial matters). From the medical point of view, this will ensure trust of the patient and his compliance to future disease management. Furthermore, while close family members should be aware of the situation, this does not substitute for direct talk with the patient. If there is disagreement, the doctor's commitment is first to the patient.

Al-Ahwal's study, although done on a small number of patients, showed that in our society, most people and patients wish to know the truth. Let us hope the study will convince doctors to talk more to their patients and will also stimulate more interest in this subject.

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References

1. Al-Ahwal M. Cancer patients' awareness of their disease and prognosis. *Ann Saudi Med* 1998;18:187-9.
2. Mobeireek A, Al-Kassimi F, Al-Majed S, Al-Shimemri A. Communications with the seriously ill: physicians' attitudes in Saudi Arabia. *J Med Ethics* 1996;22:282-5.

Reply

To the Editor: I would like to thank Dr. Al-Mobeireek for his comments on and interest in my article. I do agree that this subject needs more emphasis, especially because of the fact that this concept is not yet well accepted or applied in our society. Truth disclosure to seriously ill patients and their families is an art and needs a lot of experience. One of the suggestions to emphasize this issue is to consider lectures on medical ethics, including this subject, to our medical students before graduation. I hope more studies on this subject will be conducted.

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