



FIGURE 1. Computed tomography scan of the head showing bilateral chronic subdural hematomas at the convexity of both hemispheres (A). The chronic subdural hematoma appears as a mixture of hypo- and hyperdense material corresponding to hemorrhages of different ages. The adjacent cortical sulci are compressed. As a result of bilateral hematoma formation, there is no midline shift. The diminishing of the basal cisterns next to the brain stem (B) indicates increased intracranial pressure and movement of the brain caudally.

In summary, this report highlights the importance of considering a cSDH as differential diagnosis of headache as a rare but serious complication of epidural anesthesia, especially in connection with dural puncture and straining during labor. By the time of hospital presentation, the patient might not link the clinical symptoms to the dural puncture because several days could have passed. Awareness of this diagnosis and treatment are of uttermost importance because in young patients, cSDHs heal without sequelae after evacuation and irrigation through a cranial burr hole.

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## ACUTE ABDOMEN IN A JEHOVAH'S WITNESS WITH CHRONIC ANEMIA

*To the Editor:*—Severe chronic anemia generally interferes with establishment of an accurate diagnosis in patients presenting with

acute abdomen. It is particularly difficult to manage those patients, who simultaneously refuse blood transfusion. We report a female Jehovah's Witness patient with severe anemia who was referred for an acute abdomen as a result of twisted adnexa and briefly discuss an informed consent to blood transfusion in patients below 19.

A 19-year-old nuligravid female Jehovah's Witness was transferred by ambulance for an acute abdomen. She was pale, sweating, and drowsy. Her blood pressure was 70/30 mm Hg, hemoglobin 5.1 g/dL, hematocrit 23.4%, and white blood cell count  $9000/m^3$ . Sonographic examination of the abdomen showed a  $10 \times 10 \times 10$ -cm cystic mass in the right side of the uterus. A small amount of ascites was detected. A negative pregnancy test ruled out the presence of ectopic pregnancy. Oxygen was administered together with intravenous fluid and low-molecular weight dextran dextrose. Thirteen minutes after parental infusion, her blood pressure returned to 90/50 mm Hg, and her conscious level improved. A preliminary diagnosis of twisted right adnexa and unexplained anemia with subsequent shock was made. Both the patient and her mother, who were Jehovah's Witnesses, refused blood transfusion. However, her father, who was not a Jehovah's Witness, agreed to the blood transfusion, if medically necessary. There was, thus, disagreement among the patient's family members, but it was decided not to perform the blood transfusion even if medically necessary based on the patient's wishes. Emergent laparotomy, which was performed under general anesthesia, revealed torsion of a right paraovarian tumor together with a right polycystic ovary. No other findings, which made the patient severely anemia, were detected in the abdominal cavity. The finding of necrotic adnexa prevented our attempt to untwist it in the young patient. Accordingly, right salpingo-oophorectomy was performed. Histopathologic examination of the removed adnexa confirmed the operative diagnosis. She has had evidence of low iron intake. In addition, postoperative investigations confirmed the absence of menorrhagic or other hematologic disease apart from iron deficiency anemia (IDA). After an uneventful recovery without blood transfusion, the patient was discharged in good condition.

Jehovah's Witness patients generally refuse blood transfusions even when they need surgery for acute blood loss. Surgical management of Jehovah's Witness patients, who present with acute blood loss as a result of trauma, surgery, or other causes has been reported.<sup>1-3</sup> However, to our knowledge, an emergent operation for a Jehovah's Witness patient with severe IDA of long duration caused by low iron intake has not been previously reported.

When a patient with chronic anemia is referred to a hospital with suspicion of acute blood loss, it could be difficult to identify the cause of the anemia. When the anemia is of a chronic nature, identification of the cause could be particularly difficult if the patient has been unaware of the underlying pathology. Iron deficiency arises from prolonged negative iron balance caused by a decrease in iron intake and/or blood loss. No menorrhagia or hematologic disease, apart from IDA caused by low iron intake, was present in our case preoperatively. Determination of serum iron level preoperatively would have been helpful to identify the exact nature of anemia, ie, chronic anemia or acute blood loss. Unfortunately, such tests were not performed preoperatively because of lack of menorrhagia or acute gastrointestinal blood loss. In the present case, because the patient's conscious level improved after parental infusion, at the age of 19, she would have been able to make her own informed consent as to whether she would consent to blood transfusion instead of her parents' wishes. That is justified under the American and British law, but on the other hand, it is unclear under the Japanese law.

This report also presents a rare condition of twisted paraovarian cyst together with an ipsilateral polycystic ovary. Adnexal torsion is a well-known entity and has been adequately reported. Of the entity, 14.6% include paraovarian cyst.<sup>4</sup> On the other hand, torsion of a polycystic ovary has also been rarely reported.<sup>5</sup> However, to our knowledge, the condition, like in our case, has not been previously reported in the English literature.

In conclusion, when a patient with unexplained severe anemia was transferred, IDA of long duration caused by low iron intake should also be considered. In addition, when a Jehovah's Witness patient below age 19 required an emergent operation as a result of acute blood loss, because the patient's conscious level is clear, her own informed consent for blood transfusion should be made instead of her parents wishes.

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## CLINICALLY SIGNIFICANT CHANGE IN PHYSICIAN-ASSIGNED NUMERIC PAIN RATING SCALE SCORES

*To the Editor:*—Estimates suggest that greater than 60% of ED patients present with conditions associated with pain.<sup>1</sup> Many hos-

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**TABLE 1.** Demographic Characteristics of Study Participants

	No.	Percent
Male gender	30	83.3
Caucasian	36	100.0
Attending	19	52.8
Resident	17	47.2
PGY-1	5	26.3
PGY-2	6	31.6
PGY-3	6	31.6

pital EDs currently assess adult patients' pain using an 11-Point Numeric Rating Scale (NRS-11). With this tool, patients are asked to choose one number, on a scale from 0 (no pain) to 10 (severe pain), corresponding with the intensity of their pain. Advantages of the NRS-11 include ease of administration and scoring, multiple response options, and no age-related difficulties in using the scale.<sup>2,3</sup> Additionally, the NRS-11 does not require patients to be sitting in an upright position, use of paper or pencil, or patient literacy.<sup>4</sup>

Previous investigations have evaluated clinically significant changes on the visual analog scale (VAS).<sup>5,6</sup> No prior investigations have addressed similar clinical significance of the NRS-11. We sought to determine the minimum clinically significant difference (MCSD) in physician-assigned NRS-11 score for the assessment of pain in a prospective, descriptive trial.

EM resident and attending physician (EPs) volunteers were enrolled in the study over a 3-month period. All physicians were employed at the investigating institution at the time of enrollment or had recently graduated from the hospital's EM residency program. Residents in this program do not receive formal training on pain assessment.

The hospital is a tertiary-care center with an annual ED census of 52,000 patient visits. Hospital Institutional Review Board approval was obtained for the study.

Ten written vignettes were ordered using a table of random numbers. Each described a patient presenting to an ED with acute pain, traumatic or nontraumatic in nature. Vignettes were one paragraph in length, and described the patient's illness or injury, appearance, and brief examination. These vignettes have been used previously by Todd et al. in a study of physician-assigned changes on the VAS.<sup>5</sup>

Written informed consent was obtained and subjects were instructed to read the first vignette. EPs were asked to rate their perception of the patient's pain intensity using the NRS-11. For each additional vignette, subjects repeated this process and compared the pain intensity of each patient with the pain of the patient in the previous vignette using one of the following descriptors: "a lot more pain," "a little more pain," "about the same pain," "a little less pain," or "a lot less pain." Participants were prevented from referring back to their previous scores as well as the prior written vignettes. This process continued for each of the 10 vignettes, resulting in nine comparisons made by each subject. Subjects were

**TABLE 2.** Mean Differences in Pain Scores by Category With 95% Confidence Intervals (95% CI)

Comparison Category	No.	Mean (standard deviation)	95% CI
Much less pain	33	2.91 (1.38)	0.21-5.61
A little less pain	122	1.50 (0.94)	1.32-1.68
About the same pain	49	0.53 (0.65)	0.35-0.71
A little more pain	54	1.33 (0.78)	1.11-1.55
Much more pain	66	3.92 (1.84)	0.31-7.53