A young woman (P.A.) suffered from back pain for almost 2 years before contacting our Bone Metabolic Unit in 1996. She was a beautiful South-Italian woman, 26 years old, with dark eyes, dark hair, and an olive complexion. She was tall and thin (weight 57 kg, height 167 cm). A non-smoker, non-drinker, she had always been healthy, and never had to take drugs until age 24. At this age, she had her first baby (a male). During pregnancy, no oral calcium supplementation was prescribed, and in the last month of pregnancy she began to suffer from back pain. Her body weight had then increased by 13 kg and the baby appeared of big size on ultrasonography. Due to the conformation of her pelvis and the baby's size, her gynecologist decided for a caesarian delivery. After childbirth, her back pain became more severe. Then she was confined to bed for 2 months because of two surgical interventions for infection of the surgical wound, and during this time the back pain somewhat subsided. When she began to stand up again, her back pain became very severe (she later told me that, at the time, she had enormous difficulty to keep her baby in her arms because of pain). After another two months, an X-ray exam of the spine was performed: deformity of T9 (decreased height in the middle of vertebral body on lateral projection) and diffuse skeletal porosity were found. A 3-month course of vitamin D supplementation was prescribed. Her doctor never gave her any drugs for pain because she was breast-feeding the baby, but when the baby was 7-month old she stopped breast-feeding because the pain had become unbearable. Her period started regularly again. She suffered from continuous pain every day: domestic chores and the care of her child were very difficult to her. She used some mild analgesics and obtained only partial relief. After another 8 months she repeated the X-ray exam of the spine. It revealed a worsened deformity of T9 and similar deformity of other two vertebrae (T7 and T8). At this time, her doctor referred her to our Unit. An accurate anamnesis revealed a family history negative for bone metabolic diseases and osteoporosis. She never had bone fractures, and her risk factors for osteoporosis were limited to lack of regular physical activity and poor intake of calcium (less than 600 mg/day). A first batch of several lab tests and diagnostic exams were requested. The lab tests were completely normal and excluded thyroid dysfunction or other endocrine diseases, as well as coeliac disease and liver impairment. Calcium and phosphate metabolism were perfectly normal (Serum calcium 9.3 mg/dL; phosphate 3.6 mg/dL; magnesium 1.8 mg/dL. Plasma alkaline phosphatase 98 mU/mL. Serum osteocalcin 5.9 ng/mL; PTH 34.9 pg/mL; 25-OH vitamin D 41 ng/mL. Urinary calcium 133 mg/24h; phosphate 650 mg/24h; N-telopeptide procollagen I (NTx) 47 nMBCE/mMCrea). Bone mass, evaluated with DXA, was decreased (lumbar spine BMD 0.764 g/cm2; hip BMD 0.678 g/cm2; total body BMD 0.876 g/cm2). A diagnosis of osteoporosis (post-pregnancy and post-lactation) was made, and the patient was sent home with the recommendation of starting regular, moderate, weight-bearing physical activity as well as a correct daily dose of calcium in her diet (no less than 1 g/day). Codeine plus paracetamol was prescribed for pain, and alendronate (10 mg/day) for osteoporosis. On the first follow-up visit after 8 months, she felt much better, she had to took analgesics only after physical strain. Her physical activity and diet had been as prescribed. Bone densitometry (DXA) showed an increase of bone mass (lumbar spine +3.4%; hip +4.2%). Unfortunately, she lamented heartburn, clearly related to alendronate and she asked me to withdraw the drug. She was not planning to have a second child, and considering the patient's age and the improved , I agreed to stop alendronate for the moment. The patients was urged to continue with her physical activity and diet. A follow-up schedule was agreed upon. On a second visit after another 10 months, she felt still better, and was no more taking any analgesic drug. X-ray showed no other deformity but those previously observed. Bone densitometry showed a stable bone mass. She is paying careful attention to her diet and physical activity.