or use of healthcare services, based on a survey of the mothers and their children's doctors.

However, 6 children (2.9%) exposed in utero to repeat courses of corticosteroids were diagnosed with cerebral palsy, compared to only 1 child (0.5%) exposed to a single course. The difference was not statistically significant (p=0.12), but it raises the possibility that repeat treatment courses are detrimental. Five of the 6 children with cerebral palsy were exposed to 4 or more courses, and 5 were born after 34 weeks of gestation with normal transfontanellar sonographic status (6).

In practice: a single course

Repeat courses of corticosteroids aimed at accelerating fetal lung maturation are no more beneficial than a single course. There are also concerns about a possible negative impact on birth measures and neurological status in early childhood.

It is therefore more prudent to continue to use a single course of corticosteroids in this setting.

a- The trial was conducted in regions with varying infant mortality rates (Europe, America, China and Israel) (ref 3).

b- Despite its large size, the results of this trial have fewer practical implications because the betamethasone regimen differed from that shown to be effective in clinical trials: the mothers initially received a single injection of betamethasone 11.4 mg, while most protocols recommend 2 injections of 12 mg, 24 h apart (refs 1,5).

Selected references from Prescrire's literature search.

1- Prescrire Rédaction "Menace de prématurité: une cure de corticoïde" *Rev Prescrire* 2002; **22** (227): 297-298.

2- Prescrire Rédaction "Corticothérapie précoce des prématurés: des séquelles neurologiques" *Rev Prescrire* 2007; **27** (280): 109-110.

3- Murphy KE et al. "Multiple courses of antenatal corticosteroids for preterm birth (MACS): a randomised controlled trial" *Lancet* 2008; **372**: 2143-2151.

4- Newnham JP and Simmer K "Multiple courses of antenatal corticosteroids" *Lancet* 2008; **372**: 2094-2095.

5- Crowther CA et al. "Outcomes at 2 years of age after repeat doses of antenatal corticosteroids" *N Engl J Med* 2007; **357** (12): 1179-1189.

6- Wapner RJ et al. "Long-term outcomes after repeat doses of antenatal corticosteroids" *N Engl J Med* 2007; **357** (12): 1190-1198.

7- Crowther CA et al. "Neonatal respiratory distress syndrome after repeat exposure to antenatal corticosteroids: a randomised controlled trial" *Lancet* 2006; **367**: 1913-1919.

8- Wapner RJ et al. "Single versus weekly courses of antenatal corticosteroids: evaluation of safety and efficacy" *Am J Obstet Gynecol* 2006; **195**: 633-342.

Translated from ***Rev Prescrire*** **April 2010; 30 (318): 275**

Lyell syndrome and epileptic seizures after confusion between Lamictal° and Lamisil°

● **These two brand names are too similar, while the international nonproprietary names (INNs) are clearly different: *lamotrigine* (an antiepileptic) and *terbinafine* (an antifungal drug).**

Serious adverse effects have been reported in France after dispensing errors due to confusion between *lamotrigine* (Lamictal°), an antiepileptic, and *terbinafine* (Lamisil°), an antifungal drug (1).

Lamotrigine instead of terbinafine: severe disorders when the drug is not introduced gradually. Patients who received *lamotrigine* instead of *terbinafine* experienced serious cutaneous reactions (Stevens-Johnson syndrome and Lyell syndrome) or other severe hypersensitivity reactions. These cutaneous reactions are known adverse effects of *lamotrigine* and are more frequent when treatment is initiated at a high dose. This can occur when *terbinafine* is prescribed but *lamotrigine* is accidentally dispensed.

For example, a 54-year-old woman received *lamotrigine* instead of *terbinafine* for a mild fungal nail infection (2). She developed fever, generalised rash, facial swelling, mucosal involvement with conjunctival hyperaemia, dysphagia, a bronchial syndrome, kidney and liver damage, and hypereosinophilia. The error was discovered a few days after drug withdrawal (2).

Terbinafine instead of lamotrigine: more frequent epileptic seizures. In a case reported in France, *terbinafine* was dispensed instead of *lamotrigine* to a patient whose epilepsy had been stable on *lamotrigine*. This error resulted in more frequent seizures (3).

Oral *terbinafine* has numerous and potentially severe, sometimes life-threatening, adverse effects: gastrointestinal disorders (nausea, abdominal pain), altered sense of taste, potentially severe cutaneous disorders (rash, urticaria), life-threatening liver damage, and serious haematological disorders such as neutropenia, agranulocytosis and pancytopenia (4). In addition, *terbinafine* inhibits the cytochrome P450 isoenzyme CYP 2D6 (4).

Think, prescribe, and dispense drugs using the INN system. Errors due to confusion between Lamictal° and Lamisil° had already been reported, in several countries, including France. In 2000, the companies that market these products announced "corrective measures" (5); yet, 10 years later, errors with serious consequences continue to occur.

Pharmacist's awareness of each patient's illnesses could help prevent these types of errors. Also to think, prescribe, and dispense drugs using the international nonproprietary name (INN) first could help prevent confusion between brand names.

Selected references from Prescrire's literature search.

1- Afssaps "Erreur de délivrance et survenue de réactions cutanées graves: délivrance de Lamictal° (lamotrigine) au lieu de Lamisil° (terbinafine)" *Vigilances* 2009; (46): 2. afssaps.sante.fr accessed 24 July 2009: 1 page.

2- Le Loarer F et al. "Toxidermie sévère due à une erreur de délivrance médicamenteuse" *Ann Dermatol Vénéréol* 2009; **136**: 364-365.

3- Afssaps "Information aux pharmaciens officinaux. Information importante de pharmacovigilance. Erreur de délivrance: confusion entre Lamictal° (lamotrigine) et Lamisil° (terbinafine) à l'origine de réactions cutanées graves ou de crises convulsives" 16 February 2010: 1 page.

4- Prescrire Rédaction "Terbinafine orale: des risques graves" *Rev Prescrire* 2007; **27** (287): 668.

5- Prescrire Rédaction "Confusion entre Lamictal° et Lamisil°" *Rev Prescrire* 2000; **20** (212): 830.