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# Erratum: The Early Development of Wheeze. Environmental Determinants and Genetic Susceptibility at 17q21

There was missing disclosure information in the article by Loss and colleagues (1), published in the April 15, 2016, issue of the *Journal*. The authors omitted to mention that Erika von Mutius should have been listed as an inventor on the following patents:

- Publication number EP 1411977: Composition containing bacterial antigens used for the prophylaxis and the treatment of allergic diseases
- Publication number EP1637147: Stable dust extract for allergy protection
- Publication number EP 1964570: Pharmaceutical compound to protect against allergies and inflammatory diseases

In addition, Dr. von Mutius should have been listed as an inventor on the following patent, for which she has received royalties:

• Publication number EP2361632: Specific environmental bacteria for the protection from and/or the treatment of allergic, chronic inflammatory and/or autoimmune disorders

This information has been incorporated in the ICMJE Disclosure of Potential Conflicts of Interest form accessible from the article's online supplements tab.

## Reference

1. Loss GJ, Depner M, Hose AJ, Genuneit J, Karvonen AM, Hyvärinen A, Roduit C, Kabesch M, Lauener R, Pfefferle PI, Pekkanen J, Dalphin J-C, Riedler J, Braun-Fahrländer C, von Mutius E, Ege MJ; PASTURE (Protection against Allergy Study in Rural Environments) Study Group. The early development of wheeze. Environmental determinants and genetic susceptibility at 17q21. *Am J Respir Crit Care Med* 2016;193:889–897.

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## Erratum: Respiratory Complications of Organophosphorus Nerve Agent and Insecticide Poisoning. Implications for Respiratory and Critical Care

The authors of the article by Hulse and colleagues (1), published in the December 15, 2014, issue of the *Journal*, would like to correct several errors. In the Figure 3 legend (p. 1345), the phrase "48 hours after administration of saline into the lung" in the second sentence should be corrected to read "48 hours after sham bronchoscopy and saline BAL (at 24 and 48 h)." The words "of the same lungs" appearing in the sixth and eighth sentences should be replaced by the words "similarly affected lungs." The corrected figure legend should read:

Figure 3. Effects of hematogenous organophosphorus (OP) and aspirated OP on minipig lung. Comparison of lung architecture in anesthetized minipigs 48 hours after sham bronchoscopy and saline BAL (at 24 and 48 h) (control pig; A, D, and G), gastric contents and the agricultural OP insecticide dimethoate EC40 into the contralateral lung (indirect hematogenous injury; B, E, and H), and gastric contents and agricultural OP insecticide dimethoate EC40 into the right lung (direct injury; C, F, I). (A-C) Light microscopy images (original magnification:  $\times$ 10–20) with hematoxylin and eosin. Compared with indirect injury, direct injury caused greater alveolar and interstitial edema, neutrophil infiltration, hemorrhage, fibrin deposition, vascular congestion, and necrosis. Images edited in PowerPoint. (D-F) Scanning electron microscopy images (original magnification: ×171-324) of similarly affected lungs. Direct injury shows extensive destruction of the alveolar capillary framework, with fibrin mesh and clot formation. (G-I) Transmission electron microscopy images (original magnification:  $\times 25,000$ ) of similarly affected lungs. Both indirect and direct injury cause alveolar capillary membrane swelling. The black arrow signifies the alveolar capillary membrane in control (G) and indirect (H) lungs. After direct injury, this has led to the alveolar epithelium peeling away into the alveolar space and fibrin deposition (red arrow) in and around the alveolar capillary membrane.

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In Table 2 (p. 1349), first paragraph in the comments column, the words "acetylcholinesterase inhibition" should be replaced by "butyrylcholinesterase inhibition." In the eighth paragraph of the comments column, the second sentence should read: "Note: effects of drugs that are metabolized by either butyrylcholinesterase or esterases may be prolonged in OP poisoning."

The authors apologize for the errors.

Table 2. Clinical Management of Organophosphorus-poisoned Patients

| Intervention   | Comment  | Time Point   |
|--|--|--|
| Maintain airway and provide adequate<br>oxygenation (>85% saturations) | Quick and efficient securing of the airway. Note: the depolarizing neuromuscular blocker suxamethonium will have a prolonged effect (up to 12 h) due to butyrylcholinesterase inhibition. Avoid where possible (25, 112, 113).   | Within minutes after nerve agent<br>poisoning, within minutes to hours<br>after insecticide poisoning to avoid<br>hypoxic brain damage |
| Administer escalating dose atropine<br>regimen                         | Give intravenous atropine (initially 0.6–3 mg, doubling<br>every 5 min until muscarinic features start to subside).<br>This will help maintain patient oxygenation and lessen<br>the risk of aspiration injury. Infusions of atropine may<br>be required for many days; titrate to effect (93, 94).<br><i>Do not delay if oxygen is not immediately available</i><br>(92). | Within minutes after nerve agent<br>poisoning, within minutes to hours<br>after insecticide poisoning to avoid<br>hypoxic brain damage |
| Administer benzodiazepines   | Give diazepam 10–20 mg or lorazepam 2–4 mg to<br>control seizure activity and agitation, and to sedate<br>intubated patients.  | Minutes to hours   |
| Administer oximes  | Give 1 g pralidoxime or 250 mg obidoxime, then an<br>infusion. Oximes are not of proven clinical benefit but<br>can be considered in patients presenting early.<br>Patients should be weaned when possible, preferably<br>guided by neurophysiological studies.  | Hours to days  |
| Ventilation strategy   | Use protective ventilation (6 ml/kg); avoid plateau<br>pressures >30 cm H <sub>2</sub> O.<br>Response to NDMRs may be unpredictable (25, 114).<br>Titrate dose to effect.<br>Use of aminosteroid NMBAs (e.g., rocuronium) may<br>provide some protection of nicotinic receptors.   | For the duration of ICU stay; days to<br>weeks<br>As required for intubation and ventilation   |
| Cardiovascular instability   | Dysrhythmias and severe hypotension can occur in OP<br>poisoning and are treated by standard ICU practices<br>(53). Note: effects of drugs that are metabolized by<br>either butyrylcholinesterase or esterases may be<br>prolonged in OP poisoning.   | Hours to days  |
| Prevention of VAP  | Provide VAP prevention strategies: sit the patient at 30–45°, consider selective digestive and/or oropharyngeal decontamination (66), start antibiotics (after consultation with a local microbiologist) only if bronchopneumonia or sepsis is suspected (64).   | Hours to days  |
| Inhaled $\beta$ -agonists, anticholinergics                            | Standard therapy for many critical care units. Observe for tachyarrhythmias when combined with intravenous atropine.   | For the duration of ICU stay; days to weeks  |
| Prevention of CIP/CIM  | Wean as early as possible from the ventilator to reduce<br>the risk of CIP/CIM.  | >7 d to weeks  |
| ICU sedation   | Minimal sedation and daily sedation holds as per VAP<br>prevention strategies and staffing levels allow (64).<br>This will allow early identification of the return of<br>consciousness in poisoned patients who can then be<br>weaned from the ventilator.  | For the duration of ICU stay; days to weeks  |
| Standard ICU care to improve survival<br>of patients with ARDS         | Gl ulceration care, nutrition, thrombosis prophylaxis,<br>timely antibiotics for infections, judicious intravenous<br>fluid management and lung protective ventilation<br>strategies (115).  | For the duration of ICU stay; days to weeks  |
| Careful observation  | Careful observation of patients with OP insecticide<br>poisoning will identify cholinergic features, labored<br>respiratory efforts, and proximal muscle weakness<br>heralding the onset of IMS or delayed cholinergic<br>effects.   | Hours to days after poisoning and after extubation   |

### Table 2. (Continued)

| Intervention | Comment   | Time Point |
|--------------|---|------------|
| Extubation   | <ul> <li>Requires several hours of successful spontaneous ventilation and the ability to lift their head off the bed on at least three different time points before a trial of extubation should be attempted (96).</li> <li>If prolonged ventilation is anticipated, consider tracheostomy. Be aware of laryngeal muscle dysfunction.</li> </ul> |            |

Definition of abbreviations: ARDS = acute respiratory distress syndrome; BuChE = butyrylcholinesterase; CIP = critical illness polyneuropathy; CIM = critical illness myopathy; GI = gastrointestinal; ICU = intensive care unit; IMS = intermediate syndrome; NDMRs = nondepolarizing muscle relaxants; NMBA = neuromuscular blocking agent; OP = organophosphate; VAP = ventilator-associated pneumonia.

### Reference

1. Hulse EJ, Davies JO, Simpson AJ, Sciuto AM, Eddleston M. Respiratory complications of organophosphorus nerve agent and insecticide

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