CASE REPORT
A 21-year-old male complained of a very severe headache six weeks ago during a 2-hour domestic airplane travel (the airplane type was Boeing 737-900 ER with 189-passenger capacity). The pain arose on the left frontoparietal region which radiated into the periorbita in the superomedial aspect during airplane descent, approximately 15 to 20 minutes before landing. He described his headache as a sudden pulsatile jabbing on the head with subsequent sharp pain needle sensation on his left eye. The headache was accompanied by tearing ipsilaterally; no other associated symptoms (e.g. nasal congestion, visual disturbance, nausea, vomiting, phono- or photophobia) were present. The headache peaked in the first 15 minutes, subsided after landing but lasted for 6 hours before completely disappeared. The pain was felt both during the departure and arrival flights 3 days later when the patient was returning. However, during the return flight, the patient had consumed a tablet of 500 mg paracetamol and 30 mg pseudoephedrine 5 minutes before takeoff. As a result, he reported that the headache and the associated periorbital pain were milder than the previous one, although it had lasted for 24 hours before completely disappeared. He landed on a city and seaside airport, respectively. He traveled by air 3 times a year and it was his first episode of headache ever experienced during a flight.

Two weeks later, he travelled on a smaller propeller airplane (ATR 72-500 with 68-passenger capacity) for 60 minutes. The plane landed on a seaside airport and he did not develop headache, either during takeoff or landing. A week later, he went home with the same airplane and did not experience any airplane-related headache.

He had had no medical history of other types of headache, sinus infections, or rhinitis. He was a non-smoker and not under certain medications. He did not suffer from any flu-like symptoms prior to air travel. The family history was unremarkable. His general, neurological (cranial nerves, motor and sensibility), ENT, and ophthalmological examinations were normal, except that he suffered from myopia (OD/OS -2.75/-3.0) since 7 years ago. Complete blood count and paranasal sinus tomography were normal. The patient refused to undergo brain magnetic resonance imaging and angiography.

DISCUSSION
This is the first reported case of an airplane headache in involving an Indonesian. Our patient is a young male that is in accordance with the previous demographical findings of the previous reported cases. However, the patient had a unique experience during air travel with different aircraft types. This finding may explain the headache consistency discrepancies among the reported cases and useful in clarifying the current proposed diagnostic criteria.
long working hours, lack of sleep, not eating before departure, and might suffering from psychological stress. These were the same triggers mentioned in a 22-year-old male with a mild bitemporal headache during an airplane descent, although the type of headache may be different (unilateral frontotemporal vs. bitemporal). However, further research investigating the association of these risk factors with the occurrence of airplane headache is warranted.

We reported a unique case because our patient did not experience any headache when he was flying with a 68-passenger turboprop engines airplane. He only refer a headache when aboard a jet plane with turbofan engines. This is perhaps due to the cabin pressure difference in each type of airplane. Cabin pressure is usually described as cabin altitude, i.e. the pressure level experienced when someone is being on a certain height. Cabin air is typically pressurized at 2,438 m (8,000 feet) above sea level, in accordance with the Federal Aviation Regulations. However, the cabin pressure is varied depending on the flight or cruising altitude. Turboprop airplane usually has a maximum cruising altitude of 7,620 m (25,000 feet) above sea level that is significantly lower compared with the maximum cruising altitude of a turbofan airplane (12,497 m; 41,000 feet). Although an airplane will invariably cruise below the maximum altitude, those with a higher altitude limit (so-called the ceiling altitude) would certainly fly higher which resulted in a lower cabin pressure. We agree with the previous assumption in which the reported patient did not experience any headache during jumbo jet flight but the pain developed during a typical commercial airplane journey. Indeed, the cabin pressure of jumbo jet plane resembles the 1,432 m (4,700 feet) altitude compared with its smaller airplane counterpart that is pressurized at 2,438 m (8,000 feet) altitude. A lower cabin altitude would less likely irritate the sinus mucosal linings relative to the higher one.

It is also interesting to note the discrepancies found between Atkinson and Lee’s case and Mainardi et al with those of Berilgen and Mungen’s cases: all patients in the first and second study had reported an airplane headache each time they traveled, whereas 4 out of 6 patients in the third study did not always experience the headache during air journey. We assume that the later might have travelled with different types of airplane as reported in our case. Moreover, the cruising altitude can be varied during air travel as the plane may have to avoid the dense cloud (i.e. cumulonimbus) by climbing over it. We suggest that in the future, the duration of the journey and the onset of the headache should be described in a timely fashion and the type of the airplane used should be described in order to obtain a clear perspective.

REFERENCES