

Re: High altitude and aortic stenosis

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- *From:* dudleybates <dudleybates@xxxxxxxx>
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On Nov 1, 12:01 am, Richard <sooperdoo...@xxxxxxxx> wrote:

Well I'm just thinking, maybe I'm going overboard (please say so if you think I am).. but my son has a VSD and so he's at a higher risk of having a stroke. If his hemoglobin goes up from the higher elevation, then he's at an even higher risk of stroke. Also his circulatory system is a bit different than normal, due to a syndrome he has (22q11.2 deletion). The whole idea of moving to a higher elevation is seeming less attractive. But again maybe I'm just scrutinizing this whole thing too much, after all its just 4500 ft?

As you say, after all it's just 4500 feet. And as I said, 4500 feet is not considered truly high altitude ... except for cake mixes.

CONGENITAL HEART DISEASE — Since altitude-induced hypoxia increases pulmonary resistance and right-sided pressures, it can be expected that right to left shunting will increase in patients with congenital defects involving abnormal intracardiac communications, such as atrial septal defects, ventricular septal defects, patent ductus arteriosus, and partially corrected tetralogy of Fallot. The extent to which arterial oxygen desaturation occurs will depend upon many factors including the size of the communication, the baseline right-sided pressures, and the extent of altitude induced pulmonary hypertension.

Little has been published about the consequences of altitude exposure in such patients. One study has demonstrated higher pulmonary pressure in children with atrial septal defects born at altitude as compared with both those without such defects at altitude and those with similar defects not at altitude [21]. Another study showed that children with ventricular septal defects born in Denver have twice the pulmonary vascular resistance of children born with such defects at sea level [22].

In a retrospective review of pediatric records at Children's Hospital in Denver [ALTITUDE 5,431 ft], Durmowicz reported six cases of high altitude pulmonary edema in children with Down's syndrome and congenital heart defects exposed to only moderate altitude [23].

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Unfortunately the number of children at risk of such compl