zone valve that isolates the Skilled Nursing Facility from the rest of
the pipeline system; and third, they did not use a reduction valve
between the nitrogen cylinder and the pipeline. Subsequently, we
were not able to detect a leak in the pipeline, despite the severe
overpressure to which it had been subjected.

A point of note for anesthesia personnel: most pipelines have a
functional range between 50 and 55 psi, with a low-pressure alarm
set to go off at 45 psi and a high-pressure alarm set to go off at 60
psi. If the supply fails and the line-pressure drops, it is only necessary
to open the reserve cylinder and the manifold on the anesthesia ma-
chine will repurize at about 48 psi. But in an overpressure sit-
uation such as occurred in this case, the oxygen reserve cylinder
reduction valve will not open until the manifold pressure is less than
about 48 psi. Therefore, it is necessary to disconnect the wall hose
in an overpressure situation for the reserve cylinder to function
properly.

We were lucky in that, during this brief episode, no patients were
undergoing mechanical ventilation of their lungs while in the inten-
sive care unit, nor were any patients receiving nasal oxygen anywhere
in the hospital.

Our advice therefore is, no matter how illogical it seems and no
matter that it has never occurred previously to you, be very suspicious
when your monitors provide unexpected data.

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Periarterial Lidocaine/Hydralazine Aids Arterial Catheter Insertion
in Patients with Preeclampsia

To the Editor:—Patients who need intraarterial pressure moni-
toring often are those who pose the greatest difficulty with catheter
insertion, especially parturients with severe preeclampsia. Part of
the pathophysiology of this disease is arterial vasoconstriction. In
some of these patients, although the blood pressure is increased, the
arteries are constricted, hard to palpate, and prone to developing
spasm. Periarterial lidocaine injections do not seem to help. After
several unsuccessful attempts to cannulate a constricted artery in a
patient with severe preeclampsia, I mixed approximately 1 mg hy-
dralazine with 1 ml 1% lidocaine in a syringe and reinjected around
the artery. Five minutes later, the same artery had a bounding pulse,
and I was able to insert the catheter without difficulty.

Before attempting arterial catheter insertion in patients with pre-
eclampsia in whom the artery is difficult to palpate, I now add 2 mg
hydralazine to 2 ml 1% lidocaine. A small amount of this mixture is
injected around the radial artery. If the radial artery cannot be pal-
pated, I inject around the brachial artery in the antecubital fossa.
The injection is performed 5 min before attempting catheter insertion.

Although this technique was successful in seven of eight patients
with preeclampsia, it did not dilate the arteries in three older, chron-