

poisoning cases were examined. The average H:P ratio was 1.0 (range 0.9- 1.5). The specific COHb levels were not provided. Data from Dalpe-Scott et al. (1995) confirmed those findings in Levine et al. (2002).

Differences among COHb levels in the heart blood when compared with those found in the periphery (e.g., femoral vein) have been reported in cases that received cardiopulmonary resuscitation. Rice (1976) found wide variation in COHb levels in 300 consecutive fatal cases of CO poisoning. Source of CO poisoning, such as fire and gas heaters, was not identified in most of the 300 cases; four case studies identified the source in the paper. The author hypothesized that levels below 50% COHb were probably low due to the dissociation of COHb after death when oxygen therapy was given in an attempt to resuscitate the person. A summary of the case findings is given below.

Case 1: A child (14 months) was found apparently dead in a smoldering room fire. Artificial respiration was given on the way to the hospital and continued for about an hour before death was pronounced. Subclavian blood showed COHb levels of 15%. The report did not indicate if it was collected from the subclavian artery or vein. Blood from the femoral vein reported a 31% COHb, or a 2-fold difference between sites. The ratio of subclavian blood to femoral blood was 0.48.

Case 2: A man of 57 yrs died of CO poisoning. The CO source was a disconnected coal gas supply pipe. The emergency personnel found him cold but gave him artificial respiration on the way to the hospital where he was pronounced dead. Subclavian blood showed COHb levels of 32%. The report did not indicate if it was collected from the subclavian artery or vein. Blood from the femoral vein reported a COHb of 52%, or a 1.6-fold difference between sites. The ratio of subclavian blood to femoral blood was 0.62.

Case 3: A woman of 43 years was exposed to CO during a fire. Fire personnel recovered her and attempted resuscitation using artificial respiration and pure oxygen. Subclavian blood showed a COHb of 42%. The report did not indicate if it was collected from the subclavian artery or vein. The common iliac vein showed a COHb of 45%. Blood from the femoral vein reported a COHb of 59%, or a 1.2-fold difference when compared with the subclavian vein. The ratio of subclavian blood to femoral blood was 0.71, and the ratio of subclavian blood to iliac blood was 0.93.

Case 4: An infant of 5 months died in a room fire. Artificial respiration was performed on the infant. Femoral samples were not provided. Blood draining the blood cavity was taken and a COHb of 48% was reported, whereas the subclavian blood was reported to have a COHb of 34%. The report did not indicate if it was collected from the subclavian artery or vein. The ratio of subclavian blood to peripheral blood was 0.71.

Rice (1976) explained the results by pointing out that blood with high concentrations of COHb does not coagulate, and artificial respiration would