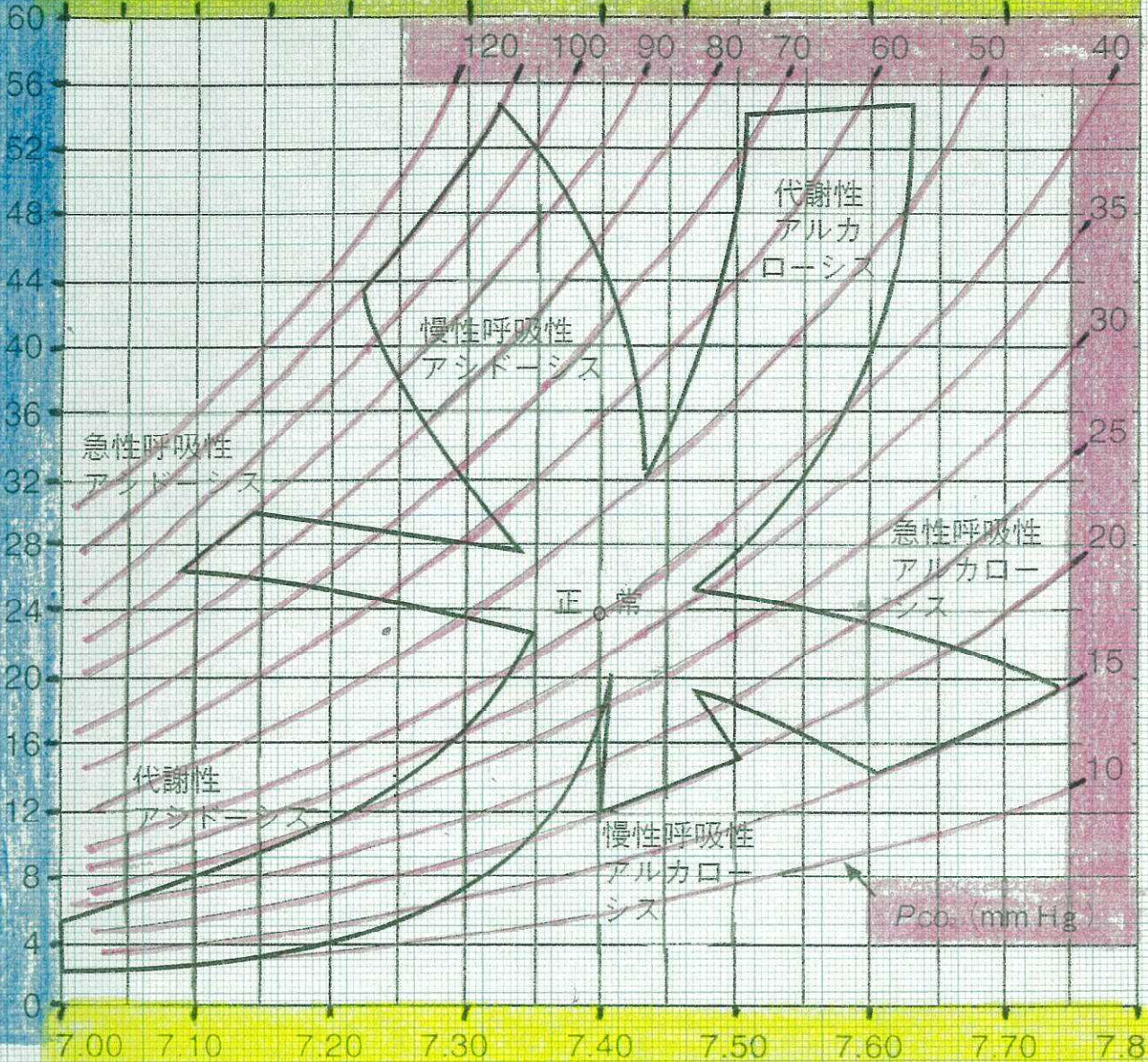


**FIGURE 4-1** Nomogram of  $\text{Pco}_2/\text{HCO}_3^-/\text{pH}$  relationship. For explanation see text. (Used with permission from author, Terry DesJardins.)

H<sup>+</sup> 動脈血 [nmol/L]

100 90 80 70 60 50 40 35 30 25 20

動脈血漿 [HCO<sub>3</sub><sup>-</sup>] [meq/L]



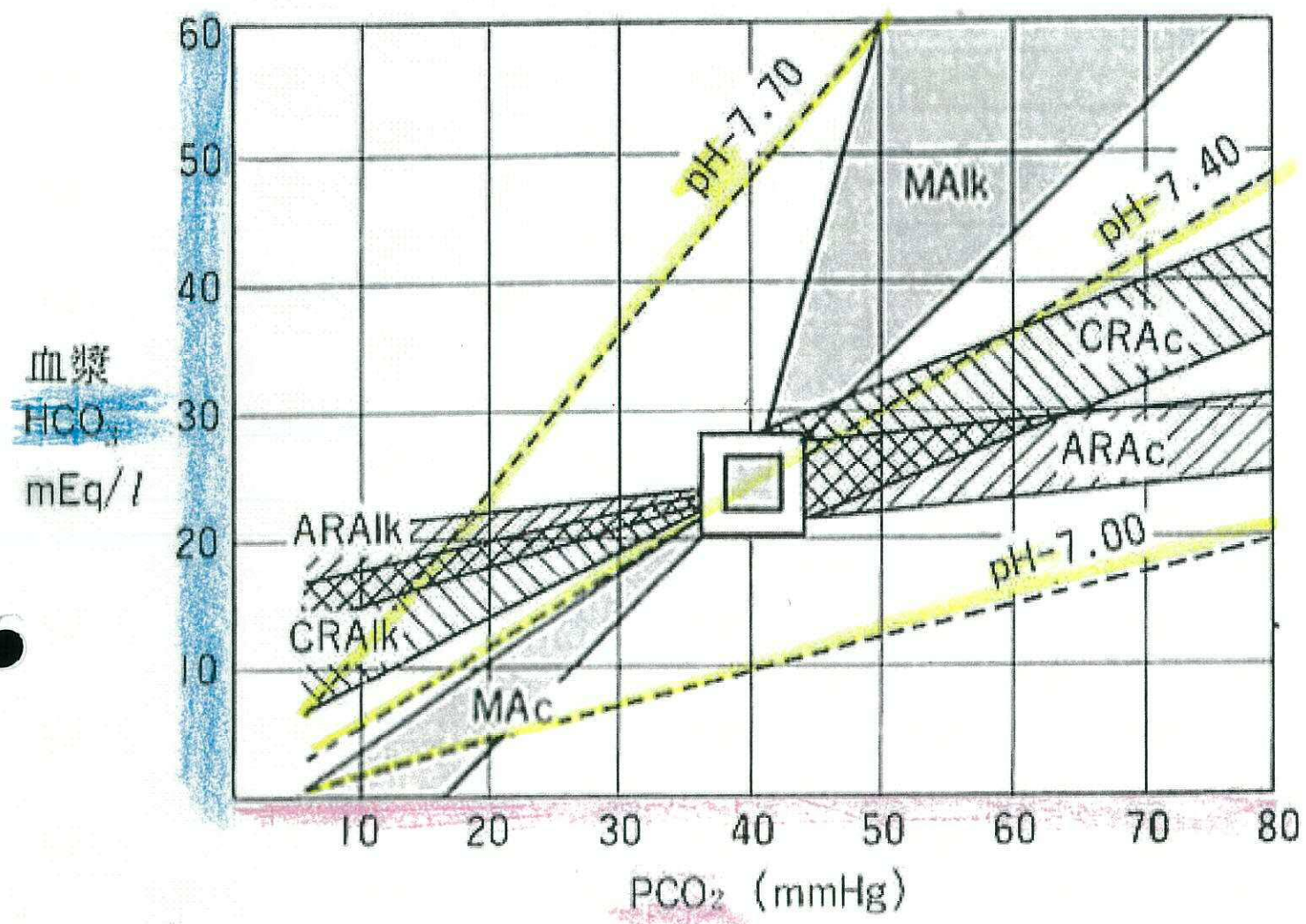


図1 単純性か混合性かを鑑別するノモグラム

患者の  $\text{HCO}_3^-$ ,  $\text{PCO}_2$  から得られた点がバンドから外れていけば混合性と考える。

- MAc : 代謝性アシドーシス
- MAlk : 代謝性アルカローシス
- ARAc : 急性呼吸性アシドーシス
- CRAc : 慢性呼吸性アシドーシス
- ARAIk : 急性呼吸性アルカローシス
- CRAIk : 慢性呼吸性アルカローシス

(Kaehny, W.D. & Gabow, P.A.: Pathogenesis and Management of metabolic acidosis and alkalosis in Schrier, R.W.: Renal and electrolyte disorders 3rd ed. Little, Brown, Boston, p. 174, 1986より引用)

equilibrium with its conjugate weak base (buffer base), e.g.  $\text{H}_2\text{CO}_3 \rightleftharpoons \text{H}^+ + \text{HCO}_3^-$   
 $\text{hemoglobin}^z \rightleftharpoons \text{H}^+ + \text{hemoglobin}^{z-1}$

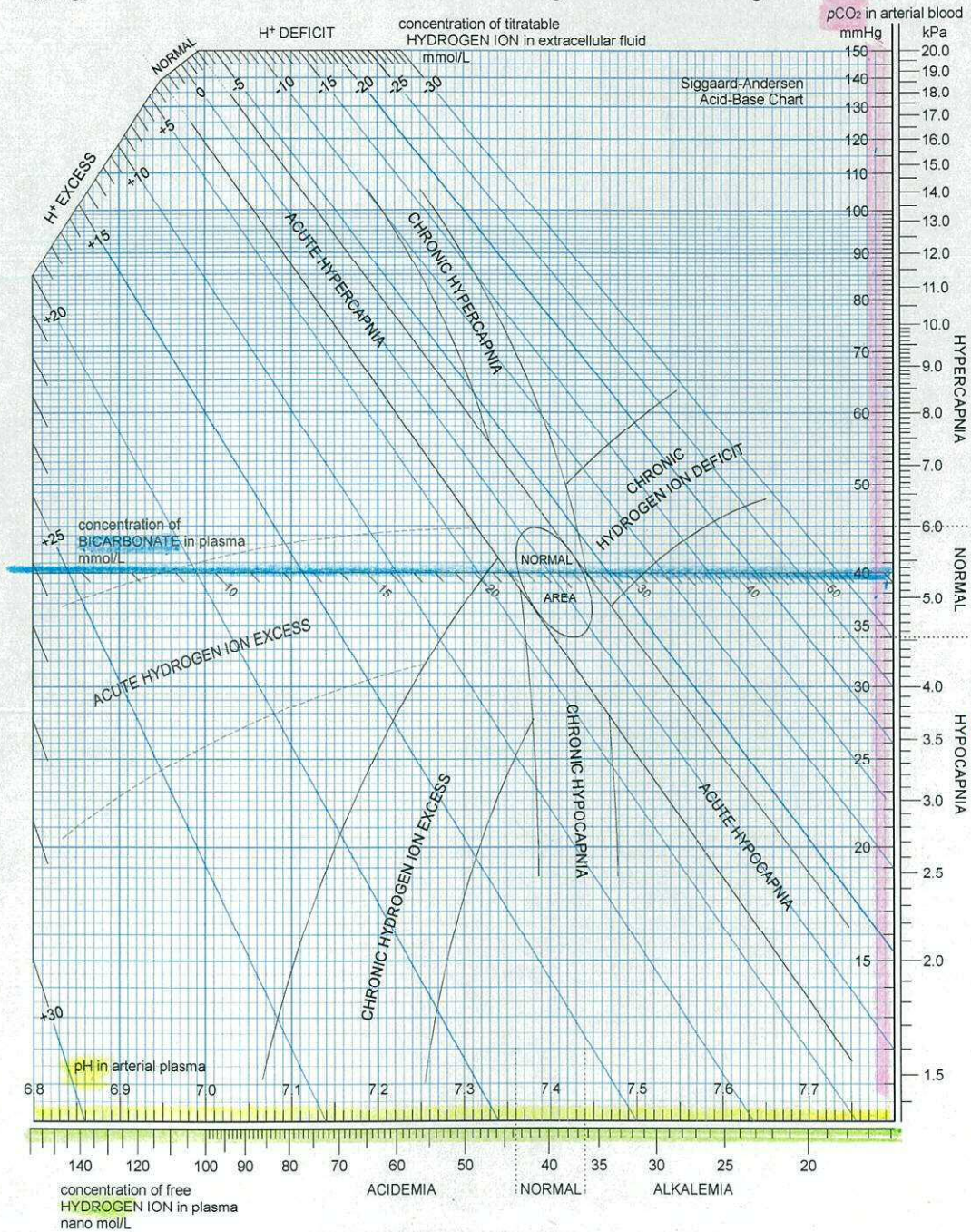


Fig. 1. Acid-base chart for arterial blood with normal and pathophysiological reference areas. The acid-base status is shown as a point with three coordinates: pH (abscissa), pCO<sub>2</sub> (ordinate), and ctH<sup>+</sup> (oblique coordinate). The bands radiating from the normal area show reference areas for typical acute and chronic, respiratory and non-respiratory, acid-base disturbances. Hyper- and hypocapnia are also called respiratory acidosis, respectively alkalosis. Hydrogen ion excess and deficit, i.e. increased and decreased ctH<sup>+</sup>, are also called non-respiratory (or metabolic) acidosis, respectively alkalosis. Copyright © 1970, 1974 by Radiometer Copenhagen A/S, Åkandevvej 21, DK-2700 Brønshøj, Denmark.