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滴定した結果水溶液中では，ΔpK_a が 1.6 以上あれば各終点が求まり，含水溶液中では ΔpK_a が 1.4 以上あれば分別滴定できた。定量には最後の終点を使い，0.3% 以内の再現性が得られた。

2種の弱酸の等量混合試料の場合，酢酸とマレイン酸，フマル酸とマレイン酸，サリチル酸とシュウ酸，コハク酸とリン酸およびマロン酸とリン酸との組合わせで滴定した結果1～3%の誤差で分別定量することができた。

Monoamine Oxidase : (V) The MAO activity in rat brain and stress.

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In previous papers, we reported the following results.: 1. Norepinephrine contents in hypothalamus and midbrain of rats remarkably decrease by the cold stress (4°C) for 5, 10 and 15 min, and then, show the tendency to return to normal level. 2. The tyrosine hydroxylase activities in the same regions increase by the cold stress for 30 min. In present investigations, we studied the fluctuation of MAO activities in rat brain by the swimming stress. Seven regions of brain were dissected from male S–D strain rats immediately after the swimming stress (leaving in water, 20°C, depth; 8 cm) for 2.5, 5, 10, 20, 40, 90, 180, 360 or 720 min. The MAO activity was assayed by incubation method using ^{14}C-tyramine as substrate. By the swimming stress, the MAO activities elevated slightly at 2.5 min, returning to the normal level at 5 and 90 min, and then rose again at 180 and 360 min in all regions except medulla oblongata. But the elevation returned to normal level at 720 min. This pattern of change of MAO activities was almost similar to that of corticosterone contents in adrenal gland, however, the pattern did not agree with that of serum corticosterone concentration. When 0.1 mg/kg of epinephrine or l-dopa was injected, the MAO activities in all regions were not influenced, whereas the enzyme activities increased especially in cortex and cerebellum by α-methyldopa (0.1 mg/kg). By the injection of corticosterone 0.5 mg/kg, the activities increased slightly but not significantly except in cerebellum, which showed the significant increasing of the activity ($p<0.05$). From the results, it may be considered that the remarkable change of norepinephrine in rat brain by the stress is not contributed to the MAO activity.