

الملخص: تهتم الدراسة بالتعرف علي الفاعلية التائثيرية السامطة والي تحدث عن طريق التعرض اليومي المتوالي لجرعات مختلفة من المبيد الفسفوعضوي سيولين وذلك علي مستويات بعض الرسل العصبية الامينية الجابا والجلوتامين في مخ الجرذ الابيض وق خلصت الدراسة الي حدوث ترابط وثيق بين التائثير الحادث ومستوي الجرعة المعطاة خاصة مع الجرعات المرتفعة نسبيا وكذلك وجود ترابط وثيق بين التغير في مستويات كل من الجابا والجلوتامين

Abstract: levels of the amino acids GABA and glutamate were determined in the whole brain of the white albino rat *Rattus norvegicus* after daily injection of 1/2, 1/4, 1/8, 1/16, 1/32 and 1/100 LD50 of cyolane

With 1/2 LD50 and increase in the level of both GABA and glutamine in the brain was recorded

Dose levels of 1/4 and 1/8 LD50 caused an increase in the level of GABA and a decrease in glutamine concentration followed by an increase from the 7th and 11th day's for 1/4 and 1/8 LD50, respectively

The induced increase in GABA level started from the 2nd week for 1/16 and 1/32 LD50 and from the 3rd week for 1/100 LD50

Dose levels of 1/32 and 1/100 LD50 caused a fluctuating increase in glutamine concentration starting from the 2nd, 3rd and 6th weeks, respectively, which was

followed by a fluctuating decrease at the 9th week for 1/32 and 1/100LD50

These findings support previous findings that the enhanced transformation of glutamic acid to GABA and glutamine is a result of disturbance in the metabolism of the glutamic acid-GABA and the glutamic acid-glutamine systems in the rat brain