DIVISION OF MENTAL HEALTH AND HOSPITALS

Administrative Bulletin 5:06

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Subject: Protocol: Rapid Neuroleptization Applicability: H

I. Background

The professional literature for the past several years has been reporting the clinical effectiveness and the relative safety of "Rapid Neuroleptization." This refers to a technique of administering rapidly repeated doses of high potency antipsychotic medication under close clinical supervision. It frequently provides rapid control of severely agitated and violent or potentially violent patients.

II. Procedure

This protocol will be followed in accordance with related mandates and guidelines of the Division of Mental Health and Hospitals, i.e., Administrative Bulletin 5:04 (formerly Administrative Bulletin 78-3), Administrative Bulletin 3:05, and Administrative Order 2:13.

A. <u>Indications</u>

Acute psychosis, potential violence or assaultiveness, signs of a growing loss of control, pacing, or any other pronounced motor restlessness (which may not be traced to extrapyramidal neuroleptic side effects). A patient showing these signs is in a crisis which is terribly painful and frightening and which creates a potential danger to self and others.

- B. A good medical history, mental status, physical examination and accurate diagnosis (as far as possible) is essential prior to the institution of Rapid Neuroleptization. Psychosis caused by acute brain disease must be excluded. Rule out tumors, head injuries, severe hypo or hypertension, electrolyte imbalance, and anticholinergic intoxication.
- C. Agents currently used are Haldol, Navane, and possibly Prolixin. These drugs are used because they are effective. They are not sedating, have high potency, and have wide dosage ranges.

D. Dosages

Customary dosages are as follows:

Haldol - up to 100 mg. per 24 hours.

Navane - up to 60 mg. per 24 hours.

These dosages may be exceeded under the following conditions:

- The illness is especially severe and/or dangerous, and has not yet responded to customary dosages.
- 2. The patient is being monitored carefully, and is in good, stable physical condition.
- A thoughtful team decision is made, led by the treating psychiatrist.
- The Unit Chief and Clinical Director and/or Medical Director are informed.
- Clear documentation is done.

E. <u>Elderly Patients</u>

There are times when Rapid Neuroleptization becomes indicated for an elderly patient. However, lower dosages are often indicated, and monitoring must be extra-careful. One third to one half the dose used for younger adult patients is usually indicated for elderly patients.

F. Routes and manner of Administration

 IM - Can be given as hourly injections to decrease florid symptoms of psychosis and/or agitated behavior.

e.g. - 5-10 mgm Haldol, IM, q 1 hr

Results are usually obtained over a two to six hour period. Once the desired effect is reached, the physician can switch to oral dose which is calculated by employing the total dosage used in 24 hours.

1 to 1 1/2 times the total IM dose is given in two divided doses; 2/3 to be given h.s.

Example: If 30 mgm IM were required to decrease or control symptoms, then 30 - 45 mgm would be an acceptable oral dose range. It can be given as follows: 10 to 15 mg in A.M. and 20 to 30 mg h.s.

- Oral route using concentrate has been recommended by some authorities. For example, 10 - 15 mg Haldol q 30 min for 1 - 3 doses until desired effect obtained.
- G. The total 24 hour dose required to decrease florid symptoms can be continued for 2 to 3 days or until night time sleep is sustained for 6 to 7 hours for two consecutive nights. During the next 10 to 14 days, medication can then gradually be decreased to lowest effective dose, using sleep as a way of determining improvement.

H. Monitoring of Patient

Total team involvement is required, since rapid neuroleptization is used for severe clinical illness. The physicians and nurses will see that the following are carefully monitored and recorded:

- Blood pressure, temperature, pulse, and respirations.
- Close observation for extrapyramidal reactions.

I. Side Effects

The occurrence of serious side-effects to rapid neuroleptization have been extremely rare. However, the following possible untoward reactions must constantly be kept in mind.

- 1. Laryngeal Dystonia or Spasms.
- 2. Cardiac Arrythmia
- Rise in body temperature, with or without somnolence, disorientation, or other signs of impairment of brain functioning. (Neuroleptic Malignant Syndrome can occur after the first dose of a neuroleptic medication.)

Note:

Refer to the Nursing Department Procedures for Rapid Neuroleptization monitoring for more details of the above (attached).

If side effects arise, they can frequently be managed by appropriate measures. If they are too severe, another medication must be chosen or the effort discontinued.

J. Program Participation

The expectation that clients receiving Rapid Neuroleptization be required to attend unit programs should be rescinded until the client is assessed to be physically able to resume program participation.

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NURSING IMPLICATIONS AND RESPONSIBILITIES FOR RAPID NEUROLEPTIZATION

I. MONITOR AND RECORD BLOOD PRESSURE, PULSE, AND RESPIRATION

- A. Write Rapid Neuroleptization above BP's to be recorded on Blood Pressure Record at the time Rapid Neuroleptization is instituted.
- B. Record all Blood Pressures, Temperatures, Pulses, and Respirations on the BP Record.
- C. Record baseline Blood Pressure, Temperature, Pulse, and Respiration (from the most recent routine entry).
- D. Monitor and record Blood Pressure, Temperature, Pulse and Respiration before each I.M. or oral dose. (If the patient refuses to have vital signs taken, document refusal and notify physician.)
- II. MAINTAIN CLOSE, CONTINUOUS, OBSERVATION: REPORT & RECORD THE PRESENCE OF THESE POTENTIAL EFFECTS:

A. EXTRAPYRAMIDAL SIGNS:

- EARLY SIGNS: Drooling. Lip smacking. Eye rolling. Protruding tongue.
- 2. AKINESIA: Drowsy.
 Lethargic. Complains of weakness or fatigue.
- AKATHESIA: Muscle cramps.

 Motor restlessness, pacing,
 complaints of feeling jittery.
 Anxious.
- 4. ACUTE DYSTONIC
 REACTIONS: (Usually occurs
 suddenly within 24 to 48 hours)

Muscular contractions.

III. TAKE APPROPRIATE NURSING ACTIONS AND DOCUMENT INTERVENTIONS:

A. EXTRAPYRAMIDAL SIGNS: FOR ALL EXTRAPYRAMIDAL SIGNS (1-6)

Immediately call the physician

Hold the next Neuroleptic dose until the physician assesses the patient.

Have on hand ready for I.M. administration, an anti-parkinson agent such as: Benzotrophine Mesylate (COGENTIN) 2 mg or Biperiden (AKINETON) 2 mg or Diphenhydramine (BENADRYL) 50 mg.

DYSTONIA:

Immediately call the physician.

Have the patient lie in a quiet, darkened room.

Follow procedure A (above).

5. LARYNGEAL/PHARYNGEAL DYSTONIA:

Gagging. Hiccup. Cyanosis. Respiratory distress. Asphyxia.

6. PARKINSON-LIKE SYNDROME:

Rigidity. Tremors. Mask-like expression. Peculiar posture. Forward gait. Slowing of involuntary movements.

LARYNGEAL/PHARYNGEAL DYSTONIA:

Immediately call the physician.
Have on hand and ready for immediate
I.M. or I.V. administration:
Diphenhydramine (BENADRYL) 50 mg or
Benzotrophine Mesylate (COGENTIN) 2
mg.
Position patient to maintain patent
airway.
Follow procedure A (above)

PARKINSON-LIKE SYNDROME:

Immediately call the physician. Stop Neuroleptic. Follow procedure A (above).

B. RARE, BUT POSSIBLE REACTIONS WHICH ARE MEDICAL EMERGENCIES:

SEVERE HYPOTENSION:

Gradual or rapid decrease in blood pressure, increase in pulse rate.

(Evaluation of baseline Blood Pressure will help to determine degree of hypotension for each individual patient.)

2. MALIGNANT SYNDROME:

Confusion, visual hallucinations, hyperthermia; hypertension, fluctuation of blood pressure; pallor; diaphoresis; salivation, tachyardia, tachypneic hypoventilation, urinary incontinence; elevated WBC, elevated CPK; elevated FBS. Rigidity. Coma.

SEVERE HYPOTENSION:

Immediately call the physician.

Have on hand for immediate I.V. administration:

Levarterenol (LEVOPHED) or Phenylephrine Hydrochloride (BRONKOMETER).

DO NOT USE EPINERPHRINE DUE TO POSSIBLE PARADOXICAL EFFECT.

Lower the patient's head and elevate the feet.

MALIGNANT SYNDROME:

Immediately call the physician.

Stop Neuroleptic.

STAT emergency treatment for symptoms.

BROMOCRIPTINE 10 mg p.o., t.i.d.

DANTROLENE SODIUM 1 mg/kg/24 hr, by continuous I.V.

3. CATATONIA:

Withdrawal. Mutism. Bizarre posturing. Rigidity. Immobility Flexibility (may follow dehydration and/or cardio/pulmonary disorders.)

4. CARDIAC ARRHYTHMIA OR ARREST:

(Very rare) When it does occur, it might be preceded by:
Urinary incontinence 24 to 48 hours before cardiac disorder, extrapyramidal syndrome or parkinson-like syndrome.

CATATONIA:

Immediately call the physician.

Stop Neuroleptic.

Observe carefully for possible medical complications.

CARDIAC ARRHYTHMIA OR ARREST:

Immediately call the physician.

Administer C.P.R.

STAT medical emergency treatment.

Stop Neuroleptic.