[Ventricular Tachycardia]

MEDICAL GRAND ROUNDS

359
65

March 15, 1956

A 55-year-old white man was admitted because of rapid heart action.

In 1948, he noted onset of dizzy spells associated with tachycardia. Some months later he noted mild, intermittent swelling of his feet and ankles.

About one month before entry, he experienced a bout of severe substernal pain.

Thirty-six hours before admission, he experienced sudden onset of tachycardia. Self dosage with quinidine and phenobarbital failed to alter it. ECG diagnosis was ventricular tachycardia.

Quinidine dosage:

[redacted]-55	1500	0.4 gram
	1700	" "
	1900	" "
	2100	" "
	2300	" "
[redacted]-55	0100	" "
	0340	" "

Conversion to NSR.

* * * *

Patient was readmitted on [redacted]-56 via clinic with recurrence of ventricular tachycardia. Converted several times after receiving 0.4 gram quinidine at 2130, reverting intermittently to ventricular rhythm. Maintenance of 0.4 gram q.i.d. sufficed to hold NSR and patient was discharged on [redacted]-56.

VENTRICULAR ARRHYTHMIAS

1. Mosey, L., and Tyler, M.O.: Effect of diphenylhydantoin sodium (Dilantin) procaine hydrochloride, procaine amide hydrochloride and quinidine hydrochloride on ouabain-induced ventricular tachycardia in unanesthetized dogs. Circulation 10:65-70 (July) 1954.

Experimental article showing that Dilantin, under these conditions, is as effective as quinidine or pronestyl in protecting against ventricular arrhythmias.

2. Scherf, D.: Treatment of cardiac arrhythmias. Circulation 8:756-768 (Nov.) 1953.

Very little information that is not available elsewhere. Emphasizes causal role of low intracellular potassium in rendering diseased myocardium more irritable.

3. Schwartz, S., Margolies, M., and Firenze, A.: Transient ventricular fibrillation: V. Effects of oral administration of quinidine sulfate on patients with transient ventricular fibrillation during established atrioventricular dissociation. Am. Heart J. 45:404-415 (March) 1953.

Good evidence that quinidine is dangerous in therapy of ventricular tachycardias in association with complete AV dissociation.

VENTRICULAR ARRHYTHMIAS AND ADAMS-STOKES SYNDROME

1. Robbin, S.R., Goldfein, S., Schwartz, M.J., and Dack, S.: Adams-Stokes Syndrome: Treatment of ventricular asystole, ventricular tachycardia, and ventricular fibrillation associated with complete heart block. Am. J. Med. 18:577-590 (April) 1955.

Authors believe quinidine and pronestyl are ineffective and perhaps harmful in treatment of ventricular tachycardia with complete heart heart block. Isuprel is recommended as drug of choice when mechanism producing Adams-Stokes is ventricular tachycardia or asystole alternating with tachycardia (or when there is doubt as to underlying mechanism). Dosage is 10-15 mg. sublingually 4-5 times daily.

2. Schumacher, E.E., and Schmock, C.L.: Control of certain cardiac arrhythmias with Isopropyl Nor-epinephrine. Am. Heart J. 48:933-940 (Dec.) 1954.

Authors treated 28 patients with Adams-Stokes attacks, most due to ventricular tachycardia. Isuprel usually caused disappearance of complete block and (in 2 cases) ventricular tachycardia. In no case did the drug increase ventricular irritability.

3. Zoll, P., Linenthal, A.J., and Norman, L.R.: Treatment of Stokes-Adams disease by external stimulation of heart. Circulation 9:482-493 (April) 1954.

Stimuli administered 30-180 times a minute at voltages to 150, using 2 external electrodes, one placed at PMI. Main value seemed to be in shortening periods of asystole following bursts of tachycardia. Latter not affected by the shocks.

SUPRAVENTRICULAR ARRHYTHMIAS (EXCEPT AURICULAR FIBRILLATION)

1. Berger, A.J., and Rackliffe, R.L.: Treatment of paroxysmal supraventricular tachycardia with methoxamine. J.A.M.A. 152:1132-1133 (July 18) 1953.

Drug possesses pressor action plus vagus-like effect and is useful in paroxysmal supraventricular tachycardia complicated by vascular collapse.

2. Levine, E.B., and Blumfield, G.: Neostigmine bromide orally in prevention of paroxysmal supraventricular tachycardia. Ann. West. Med. and Surg. 6: 642-647 (Oct.) 1952.

Oral doses from 3.75 to 30 mg. 2 to 4 times daily prevents supraventricular paroxysmal tachycardia in some patients.