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NYTIMES SEP 2 5 1974 Injections Are Also Intended to Heal Veins Damaged by

ministered—oral (like couma-rin) or injected (like heparin). The medical bulletin did not Specify what anticoagulant drugs Dr. Lungren had pre-scribed for Mr. Nixon.

Established Value

Most experts consider repeat-Most experts consider repeat-ed injections of heparin, a drug that a medical student discov-ered accidentally in 1916, to be of established value in phlebitis

therapy. Heparin's name is derived from hepar, the Latin word for liver, because that organ was found to be source a rich of arin's use was limited because of depress from the source of the source o of dangers fro mtoxic reactions. But with vastly improved puri-flcation methods, toxic reac-tions are now rare.

Because heparin has no medi-Because heparin has no medi-cal benefit when it is swal-lowed, doctors must inject it under the skin or into a vein. Its dosage is controlled by blood tests taken after the in-jections. Accordingly, it is much easier to give heparin in a hospital than at a patient's hospital than at a patient's home. It is understood that this is among the reasons that Mr. Nixon was hospitalized. Heparin is derived from the

Heparin is derived from the lungs of animais that are slaughtered for man's food. There have been conflicting stories in medical circles about a heparin shortage in this coun-try because of changes in slaughtering practices last year. The mechanism of Leparin's action is not precisely under-stood. But doctors have attribstood. But doctors have attrib-uted its anti-coagulant effect to the drug's strong negative electrical charge, which allows it to form complexes with a wide range of organic materi-als, including the proteins con-cerned with blood coagulation. Pharmacologists say that heparin exerts immediate bio-fogic action after intravenous

fogic action after infractate bio-fogic action after intravenous injection. In contrast, the oral anticoagulants take a few days before they work.

before they work. Accordingly, doctors often inject heparin at the same time they prescribe oral anticoagu-lants. Then, guided by blood bests, they taper the dosage of heparin as the body's biochem-istry is influenced by the oral anticoagulant anticoagulant.

Though specifics are lacking, a general point emphasized by Dr. Walter G. Levine in Good-man and Gilman's textbook, "The Pharmacologic Basis of Therapeutics," applies in Mr.

The Final macorogue basis of Therapeutics," applies in Mr. Nixon's case: "The physician must exert proper caution in the use of anticoagulent drugs because the range between inefficient thera-py and undue hemorrhagic [bleeding] risk is narrow" and and varies considerably from patient to patient. Individual-ized treatment and frequent ob-servation are imperative for patients on anticoagulant ther-apy, who should be considered to be continually on the brink of a bleeding state." Despite this biological phe-nomenon, patients like Mr. Nixon can shave daily without undue risk of bleeding.

By LAWRENCE K. ALTMAN

the Episodes of Phlebitis

Special to The New York Times LONG BEACH, Calif., Sept. 24 LONG BEACH, Calff., Sept. 24 —Doctors at Memorial Hospital Medical Center here have be-gun giving former President Richard M. Nixon a series of injections to prevent formation of new blood clots in the phlebitis-damaged veins of his left leg and to help existing blood clots heal.

Mr. Nixon's doctors hope that Mr. Nixon's doctors hope that the use of the anticoagulant drugs, combined with bsd rest, leg elevation, hot soaks, elastic stockings and other measures, will alleviate the symptoms from the damage that has re-sulted from Mr. Nixon's repeat-ed episodes of phlebitis during the last month of his Presiden-cv and the 46 days since his recy and the 46 days since his re-signation.

Anticoagulatin is generally considred standard medical therapy for phlebitis and is a complex treatment. Because the dosage of the drug varies from raient to patient respected paient to patient, repeated blood tests are usually required to make certain that the dosage is sufficient to achieve a biolo-gical effect, yet not too large to pose the risk of unwanted, dangerous bleeding anywhere in the body.

the body. In a medical bulletin that Dr. John C. Lungren, Mr. Nixon's personal physician, issued this afternoon, the Long Beach spe-cialist in internal medicine said: "Anticoagulation therepay was begun after Mr. Nixon's ar-rival at the hospital Monday and so far he has responded well." Dr. Lungren also said: "For

and so far ne has responded, well." Dr. Lungren also said: "For-mer President Nixon is in the process of having the series of special diagnostic studies to which I referred in my state-ment on Monday." He gave no further informa-tion. Norman Nager, a hospital spokesman, said that Mrs. Nix-on "spent a good deal of time" with Mr. Nixon. The former President also talked by phone to his daughter, Mrs. Edward Cox, last night. Mr. Nager said he was not authorized to say whether Mr. Nixon was eating hospital or specially catered meals.

meals. Dr. Lungren said just after meals. Dr. Lungren said just after Mr. Nixon was admitted to the hospital yesterday that all his statements would be specifical-ly approved by Mr. Nixon and his family in accordance with medical ethics. Anticoagulant drugs are clas-sified by the way they are ad-