Oral anticoagulants inhibit the activity of clotting factors. These drugs are used to prevent thromboembolism in circulation in patients with atrial fibrillation, artificial heart valves, congenital or acquired thrombophilia, venous thromboembolism or systemic embolism.

Absolute contraindications for oral anticoagulants include:

- a bleeding disorder
- thrombocytopenia
- aortic dissection
- bacterial endocarditis
- surgery
- CNS injuries
- epilepsy
- bleeding from the gastrointestinal tract or urinary tract
- diseases associated with high risk of bleeding, for example cancer, active stomach ulcer or duodenal ulcers or colitis
- liver failure
- cirrhosis

Relative contraindications for the use of oral anticoagulants among others include:

- conditions after surgery of the lung, prostate, uterus
- acute pancreatitis
- a significant degree of heart failure (congestive liver)

The measure of efficacy is an international normalized ratio - INR. The correct value for healthy people is 0.8 - 1.2. The higher the INR, the lower blood clotting and increased bleeding tendency. Patients with atrial fibrillation, with valvular heart disease or thrombotic embolism is the recommended INR is 2.0-3.0, while in patients with prosthetic heart valves: 2.5 - 3.5.

Too low INR (<2.0) may be the cause of thromboembolic complications, such as:

- vein thrombosis of the lower limbs
- pulmonary embolism
- cerebral infarction
- myocardial infarction.

The higher the INR (> 4), the greater the risk of bleeding. If we recommend the use of oral anticoagulants, the patient should be advised of the possibility of the following symptoms:

- propensity for bleeding after minor injuries, while shaving or brushing your teeth
- increased (heavy, prolonged) menstrual bleeding
- bleeding from the nose, gums
- bleeding from the urinary tract
- prone to bruising and bruises

Serious bleeding complications include gastrointestinal bleeding or intracranial bleeding.

If we start usage of the drug with the correct INR, then using:

- Acenocumarol the first day we administer 6-8 mg, the second day 4 mg, then based on the value of INR
- Sintrom the first day we administer 8-12 mg, the second day -
- 4-8 mg, then the dose depends on the value of the index
- Warfin 5 mg.

While starting treatment with oral anticoagulants, at the same time we use low molecular weight heparin. After obtaining INR> 2.0 we abort heparin.

Drugs intensifying the effects of oral anticoagulants include:

- Acetylsalicylic acid (Aspirin, Etopiryn, Scorbolamid, Upsarin, Alka-prim, etc.)
- acetaminophen (APAP Coldrex, Gripex, Eferalgan, etc.)
- Clopidogrel
- antibiotics (eg. clarithromycin, amoxicillin)
- chemotherapeutics (citrofloxacin, norfloxacin)

Products containing large amounts of vitamin K include spinach, cauliflower, cabbage, green peas, lettuce, avocado, soybeans and liver. Too much consumption can lead to a reduction of action of this class of drugs. A similar situation we can get with patients taking slimming diet, drinking green tea, etc.

A different effect can be achieved by patients with malabsorption of fat, treated with certain antibiotics or taking diet low in vitamin. K, cranberry juice, grapefruit, papaya, ginkgo or sage. For patients taking oral anticoagulants, the prescribed drugs for pain are opioids, e.g. Tramadol. As the anti inflammatory drugs (or for pain) you can use ibuprofen, naproxen, provided that the patient does not have fever.

## CHA2DS2-VASc

	Condition	Points
С	Congestive heart failure (or Left ventricular systolic dysfunction)	1
H	Hypertension: blood pressure consistently above 140/90 mmHg (or treated hypertension on medication)	
A2	Age ≥75 years	2
D	Diabetes Mellitus	1
S2	Prior Stroke or TIA or thromboembolism	2
V	Vascular disease (e.g. peripheral artery disease, myocardial infarction, aortic plaque)	1
А	Age 65–74 years	1
Sc	Sex category - female sex)	1