generally in Russia; rating value lower that generally in Russia; low rating (less than 1). As a result of calculations, rating of CFD regions' innovative activity for the period 2000–2008 has been defined (Table).

Rating evaluation of CFD regions' innovative activity

Region	Years					
	2000	2004	2005	2006	2007	2008
Russian Federation	1,698	1,818	1,694	1,850	1,830	1,743
Central federal district	2,169	1,868	1,654	1,720	1,800	1,721
Belgorod region	0,446	0,655	0,712	0,521	1,852	3,283
Bryansk region	0,586	1,792	2,315	2,160	2,667	2,640
Vladimir region	2,376	2,051	2,052	2,730	2,344	1,798
Voronezh region	1,573	1,728	2,441	1,984	3,096	2,249
Ivanovo region	0,780	0,705	0,729	0,747	1,424	1,204
Kaluga region	4,051	3,541	2,870	3,085	3,051	2,573
Kostroma region	0,558	1,699	1,317	0,577	0,540	0,756
Kursk region	1,210	0,775	1,049	1,591	1,356	0,849
Lipetsk region	0,751	1,811	1,581	1,188	1,632	2,009
Moscow region	3,733	3,994	3,476	3,687	3,734	3,381
Oryol region	1,957	1,251	0,979	1,633	1,470	1,784
Ryazan' region	1,840	1,221	1,134	0,825	1,260	1,388
Smolensk region	0,368	0,635	0,424	0,705	0,918	0,986
Tambov region	0,777	1,180	0,874	1,061	1,471	1,238
Tver region	2,654	1,535	1,689	2,720	1,465	2,873
Tula region	1,964	1,429	1,267	1,558	1,082	1,118
Jaroslav region	2,638	1,851	1,745	2,284	2,385	3,521

It has been established that Belgorod region has been increasing its innovative potential steadily due to opening new innovative productions: starting biogas stations within the program of developing replenishing sources of energy; deep processing of agricultural wastes and receiving nanoproducts; realizing project of creating production of asphalt-concrete modifier «Unirem» in volume of 4 thousand tons per year and utilization of worn-out tires in volume of 12 thousand tons per year; test output technology of receiving a new generation of medical implants at the basis of nanostructural and submicrocrystallic tital alloys; technology of receiving extremely solid carbon platings for micromechanics, alloyed by nitrous. Since 2010 five enterprises of the region commenced producing nanotechnological products: LLC «Belgorod plant of sapphires «Monocrystal», LLC «Plant «Paints KVIL», LLC «SKIF-M», LLC «Taxifolia», LLC «Techsapphire». At the same time, the part of highly-technological output in gross volume of industrial production remains insignificant (about 2,5%). We have outlined the following factors that restrain transition towards innovative type of economy in the region:

1) insufficient investment resources of economic subjects that can be directed to realizing innovative projects;

2) low level of commercializing innovative developments and scientific projects;

3) lack of motivation for producing innovative merchandise among enterprises;

4) insufficient development of structure of realizing and managing innovative projects;

5) lack of justified strategy of regional policy, aimed for activation of innovative processes.

Defining innovativity level of regional economy can serve as a basis for future improvement in in practice of planning and carrying out innovative activity in a region, as level of regional economy is that what needs structural improvements most of all, as well as broaden reproduction at modern technological basis, refreshment of funds, and activation of scientific and innovative-investment activity.

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GOUT IN THE REPUBLIC OF SAKHA: AGE DISTRIBUTION, RISK FACTORS, AND COMORBITIES

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Gout is considered a metabolic disease and ranked among the diseases connected with obesity, such as an arterial hypertension, coronary artery disease, stroke, and type 2 diabetes mellitus. It has been proven that intake of a considerable quantity

of meat products is predictor of acute gouty arthritis. For this reason there is great interest in studying the prevalence of gout among inhabitants of the Republic of Sakha (Yakutia) where a lipid-protein diet prevails. Though it is reasonable to assume wide spread prevalence of gout, official data on gout in Yakutia are absent. Arterial hypertension was most common feature, followed by high triglycerides and obesity in gouty patients. Preobesity and 1st degree obesity are common.

Gout is a rheumatic disease resulting from deposition of monosodium urate crystals in tissues and fluids within the body. This process is caused by an overproduction or under excretion of uric acid. Certain common medications, alcohol, and dietary foods are known to be contributory factors. Acute gout will typically manifest itself as an acutely red, hot, and swollen joint with excruciating pain [9]. These acute gouty flare-ups respond well to treatment with oral anti-inflammatory medicines and may be prevented with medication and diet changes. Recurrent bouts of acute gout can lead to a degenerative form of chronic arthritis called gouty arthritis [10]. Gout is an ancient and common form of inflammatory arthritis, and is the most common inflammatory arthritis among men. Gout may remit for long periods, followed by flares for days to weeks, or can become chronic [11].

Gout is caused by an uncontrolled metabolic disorder, hyperuricemia, which leads to the deposition of uric acid crystals, a metabolic product resulting from the metabolism of purines, in tissue [1]. Hyperuricemia is caused by an imbalance in the production and excretion of urate, i.e., overproduction, underexcretion or both. Underexcretion is the most common cause, thought to account for 80–90% of hyperuricemia [2]. Hyperuricemia is not the same as gout. Asymptomatic hyperuricemia does not need to be treated.

Risk factors for gout include being overweight or obese, having hypertension, alcohol intake (beer and spirits more than wine), diuretic use, and a diet rich in meat and seafood. Weight loss lowers the risk for gout [4]. Gout is also associated with an increased risk of kidney stones.

It is proved that a predictor of acute gouty arthritis is eating huge quantities of meat products. In this connection it is of greatest interest to examine the prevalence of the disease among residents of Yakutia, where the predominant protein- lipid diet, and might have been expected high incidence of gout.

Currently gout seen as an important medical problem that is related to the data on the impact of hyperuricemia on progression of atherosclerotic vascular disease. Gout is a metabolic disease, and hyperuricemia – one of the most important components of the metabolic syndrome [6, 8]. Found a close relationship between human purine metabolism and hypertriglyceridemia [5] Link between hyperuricemia and insulin resistance is proven now. Hyperuricemia is an independent risk factor for cardiovascular disease, so diagnosis and treatment of gout, hyperuricemia, as well as complications of the disease are the actual problem of therapy [7].

The purpose of the study. Explore contemporary gout in the Republic of Sakha (Yakutia).

Objectives. A research project has been initiated to determine the incidence and characteristics of gout in Yakutia from 2007–2012. Patients hospitalized in the department of rheumatology of Yakut City Hospital with gouty arthritis were studied.

Methods. Patients are being studied by means of a questionnaire developed by the Institute of Rheumatology (Moscow), which includes questions on anamnesis, form of gout, and specifics of treatment. Data also being collected include: laboratory measures (glucose, HDL-C, LDL-C, TC, TG, creatinine, urea, uric acid, TP, bilirubin, ALT, AST, GGTP, alkaline phosphatase, creatine kinase); urinalysis, on admission plus daily analysis of urine (creatinine, protein, uric acid); radiographic assessment of feet and wrists; ultrasound of kidneys.

Results. In 2006–2012 years 44 patients were registered. The majority of patients (n = 35) are inhabitants of Yakutsk City; the remaining 9 are from various other areas of the Republic.

Median age of the subjects is 56 years, with a range of 35–76 years; 4 patients are over 65. Secondary forms of gout and relapses of disease are common. Forms of arthritis include: acute in 3 patients, prolonged in 8 patients, chronic in 2 patients. The tophaseus form was observed at 10 patients.

Accompanying pathology includes: arterial hypertension (AH) in 22 patients, coronary artery disease (CAD) in 7 patient, type 2 diabetes mellitus (DM) in 4 patients, glucose intolerance + obesity in 1 patient, metabolic syndrome + obesity in 1 patient, uncomplicated obesity in 1 patient, metabolic syndrome without obesity in 1 patient, chronic renal insufficiency in 1 patient, and cardiovascular accidents in 3 patients (Fig. 2, 3). Nephrolithiasis in 9 (20%) patients only in patients with AH.

Median body mass index (BMI) of the patients is 32, 05 [24; 49]. Normal BMI (16%); preobesity (32%); 1st degree obesity (26%); 2nd degrees obesity (10%); morbid obesity (16%) (Fig. 4). Waist/hip ratio is 1,094 [0,9–1,46].

Metabolic syndrome (MS) features in patients with gout: obesity-50**%**; AH (≥ 130/85 mm. Hg) – 92**%**; TG (≥ 1,7 mmol/l) – 71**%**; Glucose (> 6,1 mmol/l) – 12,5**%** (HDL-C was unavailable) (Fig. 1).

Clinical case 1. Male, 57 years old with secondary gout, tophaseus form and CAD, atrial fibrillation, AH II was inspected in department of rheumatology of Yakut City Hospital. Patient has such risk factors of gout: alcohol (50 cl vodka/week), smoking, diuretic therapy (antiarythmical therapy also was admitted). Echocardiography data: Atriomegaly (LV 42 mm). LV hypertrophy. Unfortunately stroke occurs in age at 60 years old. Possible reasons of stroke are: gout pathogenesis leads to early

atherosclerosis, irregular antihypertension and antihyperuricemy therapy, non-compliance with diet, alcohol abuse.

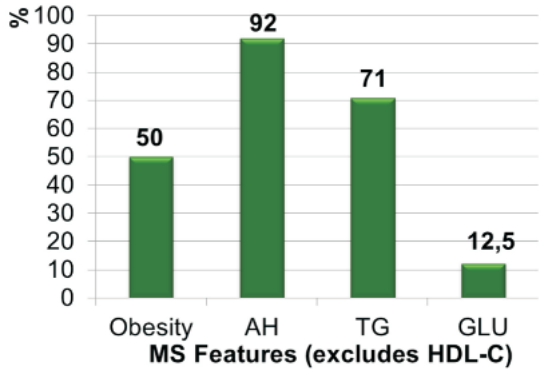

Fig. 1. Metabolic syndrome status

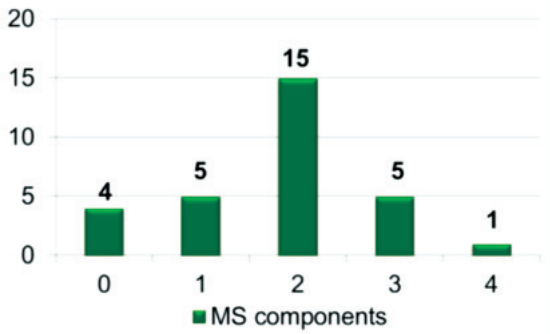

Fig. 2. Patients with MS components

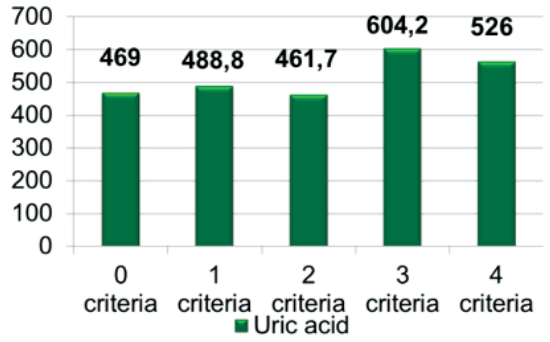

Fig. 3. Uric acid in patients with MS components

Clinical case 2. 35 year old man with secondary gout was included in the study in 2007. He had 5 episodes of acute arthritis during the year before his first hospitalization. His second hospitalization was in 2010. His father suffers from DM 2 type. This patient has multiple risk factors: obesity (BMI 44 kg/m^2), waist/hip ratio 1,46, AH with blood pressure 130/90 and 180/120 mmHg in 2007 and 2010, respectively. Also he has significant liver function elevation, chronic pancreatitis by ultrasound data, and left (59 mm) and right (35 mm) ventricular dilatation, atriomegaly (right atrium (RA) = 50x37 mm), and LV hypertrophy by echocardiography. During his second hospitalization type 2 DM was diagnosed (glucose ranging from 6,34 to 13,8 mmol/L) along with bilateral nephrolithiasis. Other laboratory data in 2007 and 2010 included: TC 3,6 and 5,03 mmol/L; uric acid 787 and 288–308 mkmol/L; ALT 40 and 94,1 IU/L; and AST 75,9 and 58,2 IU/L.

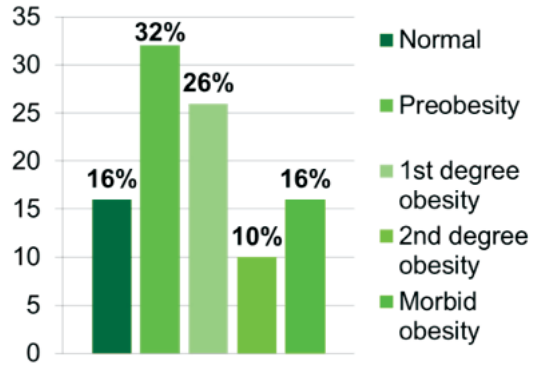

Fig. 4. Body mass index in patients with gout

Clinical case 3. Female, 60 years old with CAD, atrial fibrillation, AH II, HF III, Metabolic syndrome, obesity III, secondary hyperuricemia and gout, primary osteoarthritis. Antihypertensive, diuretic, antiischemic therapy was admitted.

Clinical case 4. Male, 51 years old with secondary gout, acute arthritis and CAD, atrial fibrillation, atriomegalia, heart failure (HF) III. Diuretic, antiarrhythmic, antiischemic therapy was admitted.

Conclusion. Thus, we observed gout in both elderly patients, predominately men, and some young men, among them there were repeated hospitalizations and multiple risk factors. Features of MS were common in patients with gout. AH was most common feature, followed by high TG and obesity. Preobesity and 1st degree obesity are common. This association suggests that lifestyle – diet, lack of regular exercise, obesity – may contribute to gout risk.

The research proceeds. Results will be used for characterization of the incidence and diagnostic features of gout in the Republic of Sakha (Yakutia) with the goal of standardizing guidelines for diagnosis and treatment of gout, assuring optimal care for these patients, especially among young patients with accompanying metabolic abnormalities.

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BUSINESS ACTIVITY AS A CHANGE AGENT OF COMPETITIVENESS OF THE COMPANY IN THE STOCK MARKET

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Attraction of relatively low-cost funds for enterprises remains its applicability in any phase of its development. As on date, one such source is the stock market which may allow them to build productive capacities and demonstrate transparency in their activities indicating the level of company development. As it is known, the stock market has a number of benefits which can include the following:

- Money attracted by placing of securities are the cheapest in the world.
- When placing securities, mortgage securities is not required.
- Placing of securities allows the company to know its value and its increment.
- Reduces the cost of financing in local banks.
- It gives the possibility to enter international markets, etc. [1].

However, the degree of use of all advantages of the stock market for the company's financial status shall be determined, as the financial position of the company shall be subject to careful attention of the potential investor that takes the decision about investing in the stock market. As Peter Lynch wrote in his article «The twenty golden rules»: «Never invest in a company if you don't know its financial condition. It is a company with a bad financial situation who led to record losses» [2]. Accordingly, one of the main indicators of the company competitiveness in the stock market is a business activity as it describes the economic situation and development of the enterprise. Today, there are many definitions of business activity, describing it from every side. To our opinion, the concept of business activity of the enterprise can be viewed as a set of indicators characterizing the results and effectiveness of the current production operation.

According to Kovalyev, quality criteria of these indicators shall be:

- Breadth of products sales markets.
- Availability of products for export.
- Goodwill of business which is expressed in reputation of clients using its services.

The quantitative criteria of business activity of the enterprise shall be:

- rate of plan delivery (fixed by the superior organization or self-fixed) for the main aspects;
- assurance of prescribed rate of their growth;
- level of resource efficiency at the enterprise [3].

According to T.I.Yurkov and S.V. Yurkov indicators of business activity enable determining the cost-effectiveness of resources used by the entity. Advantage of this definition is its brevity. However, this definition does not give a complete description of the analyzed category. An even more narrow concept of business activity of the enterpris was given by the financial economists A.D. Sheremet, R.S. Sayfulin and E.V. Negashev. In their view, it is characterized by only «the rate of current assets turnover of the entity».

The advantage of this definition is that it details the main factor of enterprise business activity.

Business activity is a complex and dynamic characteristic of entrepreneural activities and the efficiency of resource use. Levels of business activity of a certain organization reflect the stages of its life (origin, development, growth, recession, crisis, depression) and show a degree of adaptation to rapidly changing market conditions, the quality of management. Business activity can be described as motivated macro- and micro-level of process management of sustainable economic organizations