IMAGE: A MAP OF THE STARS OF THE ORION CONSTELLATION

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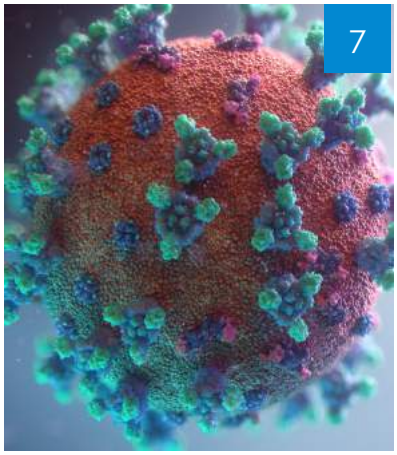
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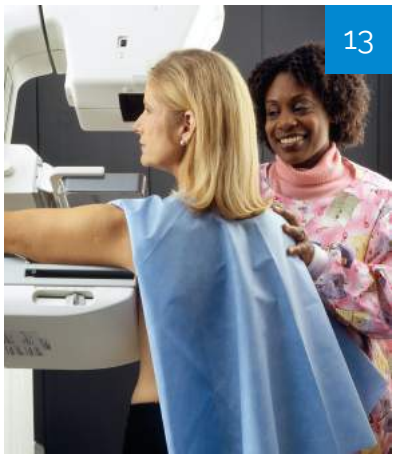
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Regionality of Sars-Cov-2 Epidemic Under the Influence of Prevalence of Alpha-1 Antitrypsin Deficiency: Similar Case-Fatality Rate in All the Regions but About 10-Fold Higher Number of Patients or Deaths Per Population in American and European Regions

Hiroshi Yoshikura

ABSTRACT

Relation between the epidemic size of COVID-19 and the population size was examined for 184 countries in different regions in the world. The plot of the number of the patients or that of the deaths against the population size revealed that the number of the patients or the deaths and the population size were correlated with correlation coefficient 0.5~0.9 within regions but not necessarily across regions; In African region, the correlation emerged only when the region was further divided into sub-regions used by UN Statistics Division. The case-fatality rate was ~0.01 for all the regions or sub-regions. In American and European regions where alpha-1 antitrypsin (AAT) deficiency is prevalent, the number of patients or deaths per population was ~10-fold higher than in the other regions. Analysis indicated that clustering of population with AAT deficiency was necessary for large outbreak to occur.

Keywords: sars-cov-2; region; population size; outbreak size; case fatality, alpha-1 antitrypsin deficiency.

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Keywords: sars-cov-2; region; population size; outbreak size; case fatality, alpha-1 antitrypsin deficiency.

Author: Emeritus Member, AIDS Research Center, National Institute of Infectious Diseases, Tokyo, Japan.

I. INTRODUCTION

Alpha-1 antitrypsin (AAT) deficiency is an autosomal genetic condition that mainly affects Caucasians of European heritage (1-2). As AAT inhibits SARS-CoV-2-priming protease TMPRSS2 that mediates SARS-CoV-2's cell entry (3-5), it is possible that populations with AAT deficiency enhanced SARS-CoV-2 epidemic. In fact, the epidemic size of SARS-CoV-2 was correlated with the prevalence of AAT deficiency in Italy (6) and among countries in the world (7-8). As regional factor(s) could be involved in the geographical distribution of SARS-CoV-2 epidemic, I examined relation between the epidemic size of SARS-CoV-2 and the population size region by region.

II. MATERIALS AND METHODS

SARS-CoV-2 epidemic data accumulated by WHO till 25 April 2021 for 184 countries in the world, 53 in Europe, 44 in America, 42 in Africa, 22 in Eastern Mediterranean, 13 in Western Pacific, and 10 in South-East Asia, was derived from https://covid19.who.int/table, population size of countries from https://www.Worldometers.info/world-population/population-by-country/; and population with AAT deficiency from Blanco *et al.*'s publication (2). For analysis, the number of the patients or that of the deaths due to SARS-CoV-2 infection was plotted in the vertical axis against the population size of countries in the horizontal axis both in the logarithmic scale (Figs. 1 and 2). Numeric data obtained from the analysis are summarized in Table 1.

2.1 Correlation between the epidemic size and population size

Correlation coefficient (CC) between the population size and the number of the patients or the deaths was 0.9017 or 0.8496 for Europe, 0.9540 or 0.9953 for America, 0.9931 or 0.9908 for South-East Asia, and 0.4583 or 0.4129 for East Mediterranean (see columns "CC: P vs. Pop" or

"CC: D vs. Pop" in Table 1). Correlation was absent for Africa and for Western Pacific regions (CC<0.3) (boxes shaded in Table 1).

For Africa, however, once the region was divided into sub-regions used by UN Statistics Division, correlation emerged with CC>0.46 except D vs. Pop for Eastern Africa (box shaded). For Western Pacific, if China that outperformed other countries (large circles on the right end of Fig. 1B) was removed, the CC became>0.73 both for the patients and the deaths.

It was thus found that basically the size of SARS-CoV-2 epidemic was correlated with population size within regions but not across regions. It was probably because people, including asymptomatically infected people occupying 30% of the infections and being 75% as infectious as those with symptoms (9), moved within regions.

2.2 Plot of the number of the patients or the death in the vertical axis against population size in the horizontal axis

For Europe, America (triangles and circles, respectively, in Fig. 1A) and South-East Asia (triangles in Fig. 1B), the slope of the plot was 45° indicating that the chance of infection was the same irrespective of the population size. CC between the number of the patients or the deaths and the population size was 0.84~0.99 (Table 1). For Western Pacific (circles in Fig. 1B), East Mediterranean (squares in Fig. 1B) and African regions (Fig. 2A), the slope of the plots was milder indicating that the chance of infection decreased as population size increased. CC between the number of the patients or the deaths and the population size was 0.41~0.76 (Table 1).

Thus, the number of the patients and that of the deaths were proportional to the population size within regions, i.e., outbreak of SARS-CoV-2 was basically regional, and stochastic despite of different measures taken in different countries (10).

2.3 Case-fatality and number of the patients or the deaths per population

Case-fatality rate is represented by the vertical distance between the plots of the number of the patients and the number of the deaths (Figs. 1A, 1B and 2A). It was 0.01~0.02 for all the regions with possible exception of Algeria/Egypt/Sudan (0.0492) (Table 1, column case-fatality (D/P)).

The number of the patients or the deaths per population is represented by the vertical distance of the plots from the horizontal axis. As summarized in Table 1, the number of patients per population (Patients/Pop) was 0.0548~0.0606 for Europe and America, but it was 0.01 or less for the other regions. The number of the deaths per population (Death/Pop) was 0.00115~0.00148 for Europe and America but was 0.0001~0.0004 for the other regions.

Thus, the outbreak size was 5~10-fold larger for American and European regions than for the other regions, which was expected from the high prevalence of AAT deficiency in European and American regions.

[Note: It should be reminded that the number of the patients or the deaths per population increases as epidemic progresses. In that sense, the value is expected to be higher in countries where the epidemic started earlier. In the present case, however, the epidemic started first in China, Japan, Republic of Korea and Thailand (WHO situation report–1https://covid19.who.int /table), and countries with the higher number of the patients or the deaths per population are those in European and American regions.]

2.4 Influence of AAT deficient population on SARS-CoV-2 epidemic in non-American non-European regions

AAT deficiency is found in regions other than American and European regions (2). Non-American non-European countries in Blanco et al.'s list (2) were grouped into those with AAT deficiency >1 ‰ and those with AAT deficiency <1‰. The number of the patients or the deaths due to SARS-CoV-2 was plotted in the vertical against the population size in the horizontal axis (Fig. 2B). The plot for countries with AAT deficiency >1‰ and that for countries with AAT deficiency <1‰ overlapped and the plot level was that of non-European non-American regions. It

appeared that AAT deficiency was unrelated to the epidemic size of SARS-CoV-2. It was not necessarily the case, however.

Countries with AAT deficiency >1‰ in non-European non-American region are: Cameroon, Cape Verde, Morocco, Nigeria, Somalia, Tunisia, Mozambique, Republic of Congo, South Africa, Iran, Malaysia, Papua New Guinea, Philippines, Singapore, Thailand, Pakistan, New Zealand and Australia, which are interspersed by countries with frequency of AAT deficiency <1‰: Democratic Republic of Congo, China, Indonesia, Japan, Mongolia, South Korea, Nepal, India and probably others. In Europe and America, all the countries are with AAT deficiency and such countries are packed together. Prevalence of AAT deficiency was 18.7 ‰ (4-63‰) in countries with AAT deficiency in non-European non-American regions, which was about two-fold lower than 36.5 ‰ (6-114 ‰) in European American regions. It is possible that there is a threshold in terms of prevalence of AAT deficiency, above which SARS -CoV-2 epidemic explodes.

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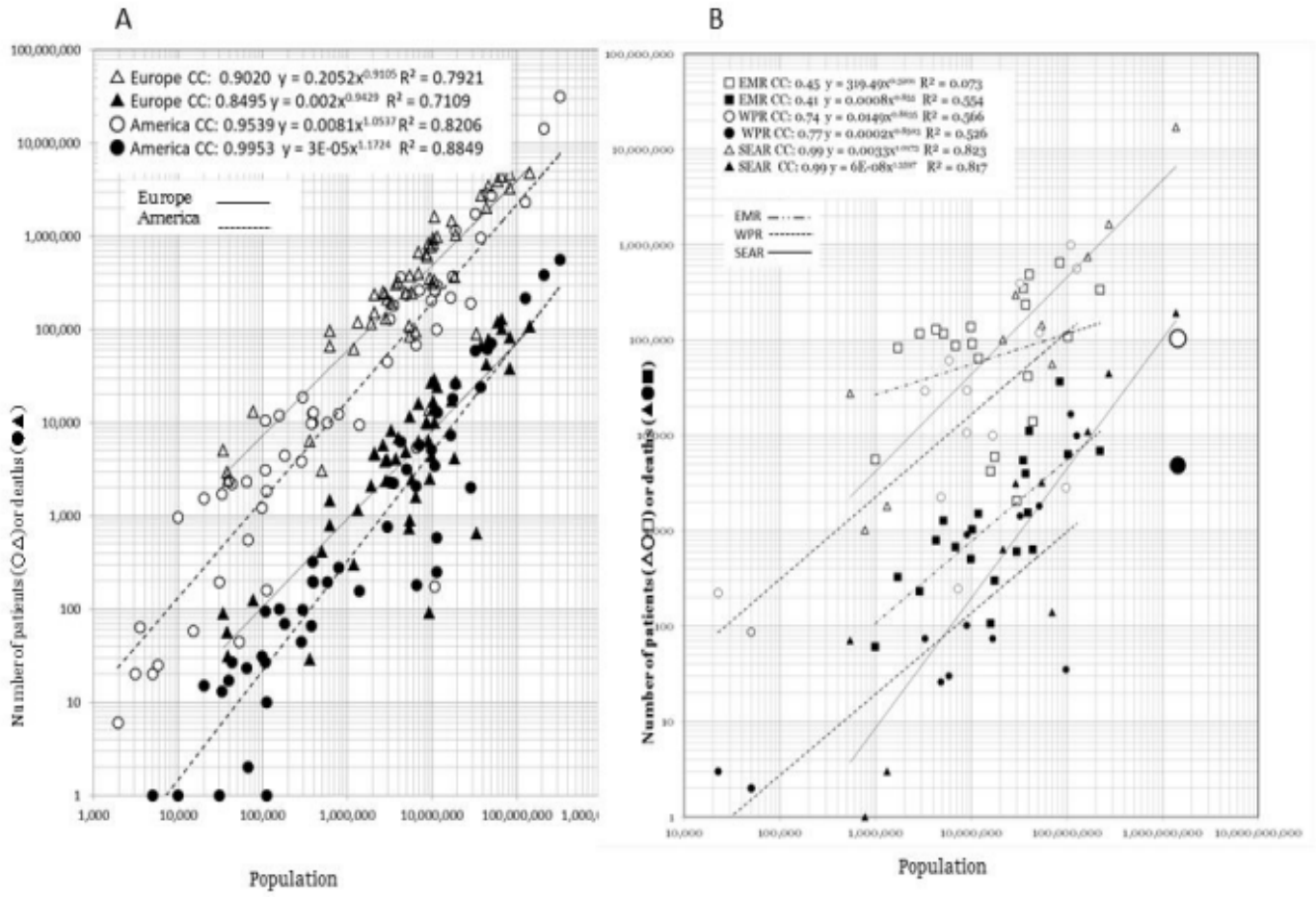

Figure 1: Plot of the number of the COVID-19 patients or the COVID-19 deaths in the vertical axis against the population size of the countries in the horizontal axis both in logarithmic scale. Panel A: European and American regions. Panel B: Eastern Mediterranean (EMR), Western Pacific (WPR), and South-East Asian (SEAR) regions

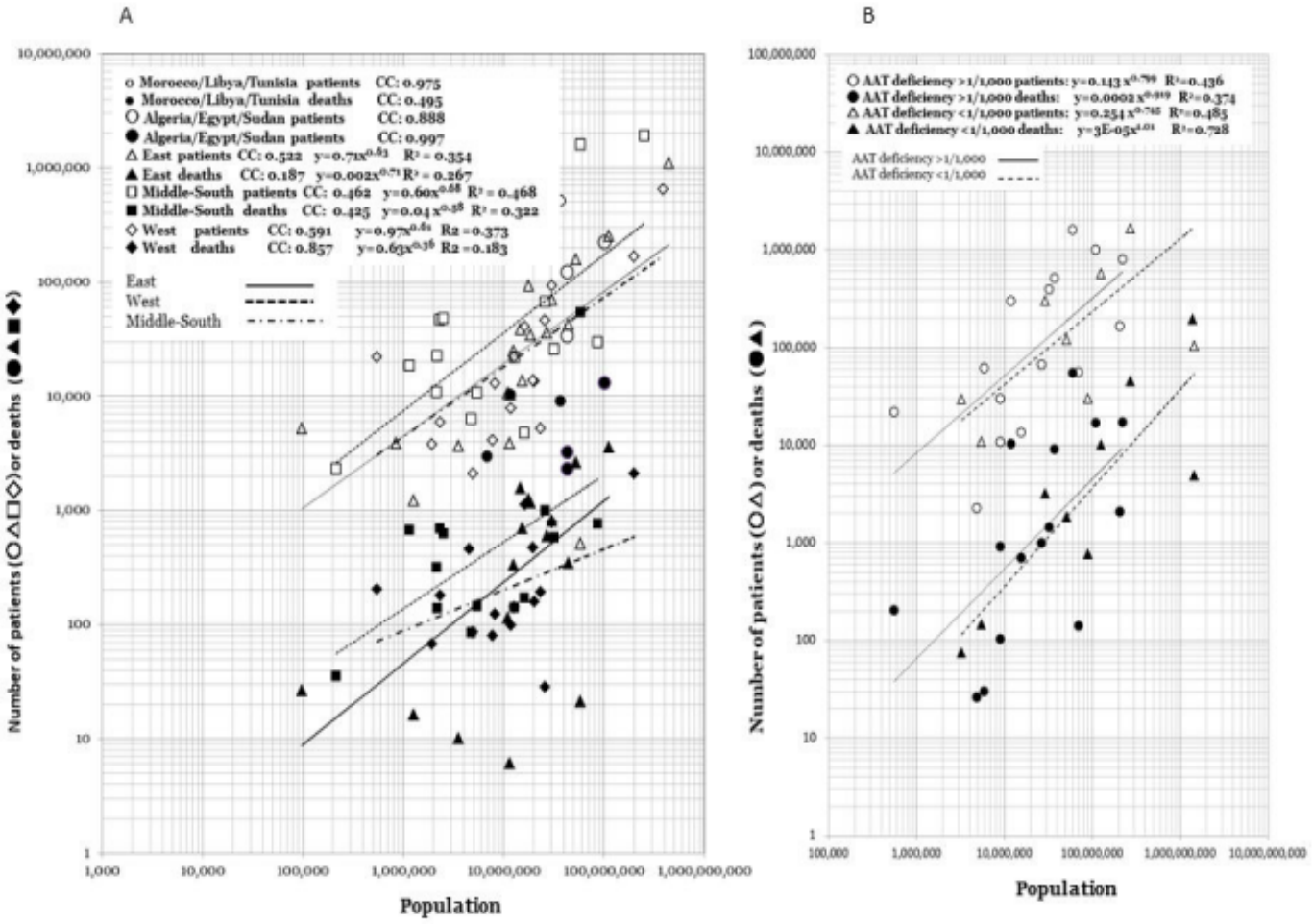

Figure 2: Plot of the number of the COVID-19 patients or the COVID-19 deaths in the vertical axis against the population size of the countries in the horizontal axis both in logarithmic scale. Panel A: African sub-regions. B: Non-European non-American countries with known prevalence of AAT deficiency

Table 1: Summary of numerical data

Region	population (Pop)	Patients (P)	P/Pop	Deaths (D)	D/Pop	D/P	CC: P vs. Pop	CC: D vs. Pop
Europe	922,564,261	50,573,450	0.0548	1,058,903	0.00115	0.0209	0.9017	0.8495
America	986,531,492	59,786,443	0.0606	1,457,383	0.00148	0.0244	0.9540	0.9953
Western Pacific	1,909,095,753	2,310,266	0.0012	35,938	0.00002	0.0156	0.0372	0.2307
Western Pacific w/o China	473,002,736	2,206,802	0.0047	31,082	0.00007	0.0141	0.7363	0.7690
South-East Asia	1,995,607,815	19,965,648	0.0100	254,958	0.00013	0.0128	0.9931	0.9908
Eastern Mediterranean	718,849,493	3,060,944	0.0127	79,955	0.00011	0.0261	0.4583	0.4129
Africa	4,656,625,874	19,746,700	0.0042	517,873	0.00011	0.0262	0.2811	0.2420
Africa: Algeria/Egypt/Sudan	186,254,365	375,979	0.0020	18,496	0.00010	0.0492	0.8881	0.9974
Africa: Morocco/Libya/Tunisia	54,943,940	982,361	0.0179	22,166	0.00040	0.0226	0.9759	0.4956
Africa: Eastern	443,516,258	1,082,398	0.0024	23,410	0.00005	0.0216	0.5224	0.1876
Africa: Middle-South	252,353,587	1,886,240	0.0075	59,461	0.00024	0.0315	0.4621	0.4623
Africa West	391,630,456	635,423	0.0016	6,195	0.00002	0.0097	0.5917	0.8574

Red Eye the Main Symptom of Covid-19: A Case Report and Further Review of Literature

Dr. Pradip Kumar Das & Dr. Eshita Das

ABSTRACT

Introduction: From December 2019 onwards, corona virus disease 2019 (COVID-19) has become a global pandemic caused by the highly transmissible severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Although ocular manifestations in humans are mild and rare, the route of infection through ocular secretions is currently unknown, and it remains unclear how SARS-CoV-2 penetrates into the ocular retions1, 2. Probable theories include direct inoculation of the ocular tissues from respiratory droplets or aerosolized viral particles, migration from the nasopharynx via the nasolacrimal duct, or even hematogenous spread through the lacrimal gland. Patients invaded with SARS-CoV -2 can present with symptoms of conjunctivitis, including eye redness, ocular irritation, foreign body sensation, tearing and chemosis or swelling of eyelids 4, 5.

Keywords: NA

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Red Eye the Main Symptom of Covid-19: A Case Report and Further Review of Literature

Dr. Pradip Kumar Das[α] & Dr. Eshita Das[σ]

ABSTRACT

Introduction: From December 2019 onwards, coronavirus disease 2019 (COVID-19) has become a global pandemic caused by the highly transmissible severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Although ocular manifestations in humans are mild and rare, the route of infection through ocular secretions is currently unknown, and it remains unclear how SARS-CoV-2 penetrates into the ocular retions1, 2. Probable theories include direct inocula- tion of the ocular tissues from respiratory droplets or aerosolized viral particles, migration from the nasopharynx via the nasolacrimal duct, or even hematogenous spread through the lacrimal gland. Patients invaded with SARS-CoV -2 can present with symptoms of conjunctivitis, including eye redness, ocular irritation, foreign body sensation, tearing and chemosis or swelling of eyelids 4,5. There have been no reports of COVID-19 patients experiencing blurred vision, subconjunctival hemorrhage, eyelid ecchymoses, conjunctival scarring, keratitis, or pseudomembrane formation. Patients who have acquired the new coronavirus may have ocular symptoms. Conjunctivitis is an inflammation of the membrane covering the eyeball. It is often referred to as 'pink eye'. Viral conjunctivitis is known to present with upper respiratory infections (colds, flu, etc.) and may be a symptom of the COVID-19. A recent global study reveals that "conjunctival congestion" or "red eye" can lead to a confirmed diagnosis of COVID-19 infection9,10. The present Case study shows the confirmed diagnosis of covid-19 infection with Red Eye or Conjunctivitis as the main symptom of presentation. Based on this information, the occurrence of conjunctivitis is low as compare to other systemic manifestation of Covid-19 infections.

Author α: MBBS, DTM&H, Ph.D, MBA, D.Lit.
σ: MBBS, MD (PGT).

I. CASE DESCRIPTION & DISCUSSION

A 34-year-old apparently healthy Security Guard, residing at K.M. Bhattacharyya Street, Serampore, Hooghly, working in a Multi–Super-speciality Hospital of Serampore of Hooghly District under the State of West Bengal of India presented in the private clinic on 1st May 2021 with one day history of redness, mild watery discharge and light photophobia in both the eyes. The patient had no symptoms of fever, cough, shortness of breath, or general malaise. In his personal history, he did not declare any travel abroad in the last 15 days. Due to the second wave infections highly prevailing in the state of West Bengal, swab tests for SARS-CoV-2 were recommended along with routine blood tests and chest x-ray etc. The RT-PCR test was applied on 2nd May 2021 and 3rd May 2020 had positive results with Ct value (ORF1a/ORF1b/N/N2 Gene)-29. In his ophthalmic examination, the visual acuity was 6/6 for both eyes without correction. Intraocular pressure was 14 mmHg on the right and 12 mmHg on the left eye. Slit-lamp examination of the right eye revealed mild eyelid edema and serous secretion with 2+ conjunctival injections, mild chemosis. The cornea was transparent, and no sign of inflammation was detected in the anterior chamber. Fundus examination revealed vital optic disc and macula. Anterior and posterior segment examination of the right and left eye was normal. On his physical examination, it was noted normal Blood Pressure (130/80 mm of Hg), Pulse rate (76/m) and normal temperature (98.4 Degree Fahrenheit), normal respiration rate (18/m). On his GI. CVS, Respiratory and Nervous system examination, did not show any abnormality or any

tenderness or enlargement of the submandibular, preauricular, or cervical lymph nodes. The patient declared that he used personal protective equipment during close contact with suspected COVID-19 cases in the Emergency Department while he was on duty works. His chest computed tomography and chest X-ray showed no significant parenchymal lesion in the lungs, both hila were normal, cardiac shadow was within normal, diaphragm & angles were normal. The routine blood examination showed levels of fasting glucose (110 mg/dl), in (08.00 mg/L), AST (24 U/L), ALT (44 U/L), LDH (190 U /L), and lymphocytes % (24.5%). He was started on taking systemic Ivermectin 12 mg and Azithromycin (500 mg) od for 5 days, Levocetzine 5 mg daily for 5 days and Moxifloxacin Eye drop 1-2 drop thrice daily and instructed to self quarantine until the complete resolution of the infection. Because of the infectious nature of COVID-19, quarantine protocols prevented access to the hospital during the active phase of the disease[3].

II. DIFFERENTIAL DIAGNOSIS

Ocular manifestations of COVID-19 are not a common one. It was reported that most patients experiencing mild conjunctivitis otherwise indistinguishable from other viral causes. Differential diagnosis includes other viral conjunctivitis like Adenovirus conjunctivitis, Bacterial conjunctivitis ,Allergic conjunctivitis, Herpes simplex virus keratitis, Anterior uveitis, Foreign body, Chemosis in a critically ill patient.

III. PROGNOSIS

Ocular manifestations of COVID-19 are recently thought to be self-limited. Various case study reports revealed no sight-threatening manifestations of COVID-19.

IV. COMPLICATIONS

At present no serious complications of ocular manifestations of COVID-19 was reported, but larger studies and long-term follow up of these patients have to be followed up for a long period .

V. CONCLUSIONS

Corona viruses leading to ocular diseases are relatively rare compared to adenovirus and influenza viruses. Truly it is evident that the main route of transmission of the SARS-CoV-2 is through the respiratory tract, several studies have already been done regarding infection in the unprotected eyes. Studies have shown that invasion of SARS-CoV-2 into the human body requires the ACE-2 receptors for cell penetration[7]. The ACE-2 receptors are found not only in human type 2 alveolar epithelial cells but also in the cornea and conjunctiva. This indicates that ocular surface tissue may be a potential target tissue for SARS-CoV-2. Recently, it has not been cleared whether ocular secretions are contagious or not However, it is presumed that, when the ocular surface comes into contact with SARS-CoV-2, virus particles can introduce into the respiratory tract through the nasolacrimal canal. Therefore, it is necessary to use protective glasses or shields. Thus, it is advised that all physicians and ophthalmologists should be cautious when facing a patient with conjunctivitis and take proper steps for the protection of possible ocular transmission of SARS-CoV-2 until a vaccine is recommended[8,9].

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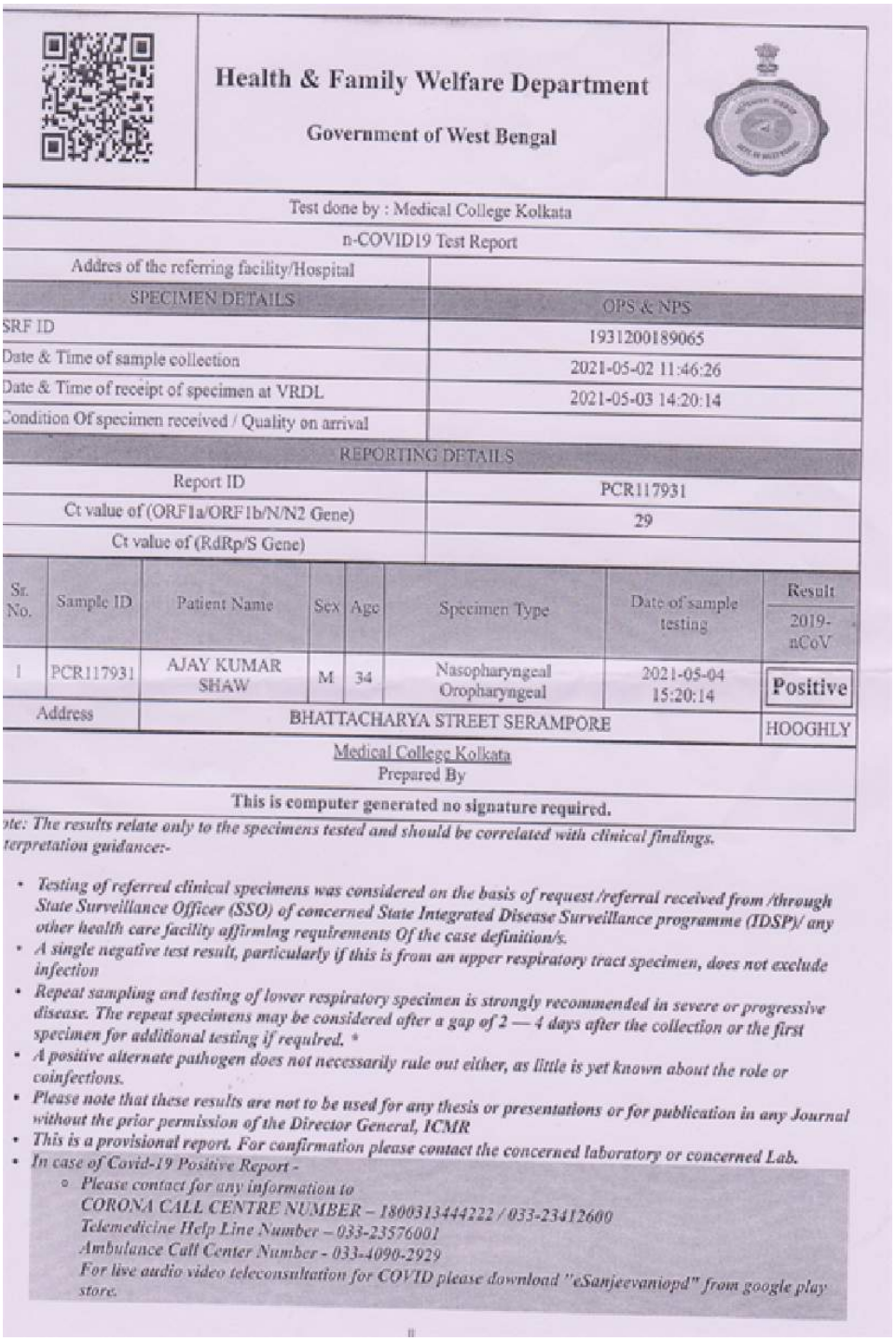


Health & Family Welfare Department

Government of West Bengal

Test done by : Medical College Kolkata

n-COVID19 Test Report

Addres of the referring facility/Hospital	
SPECIMEN DETAILS	OPS & NPS
SRF ID	1931200189065
Date & Time of sample collection	2021-05-02 11:46:26
Date & Time of receipt of specimen at VRDL	2021-05-03 14:20:14
Condition Of specimen received / Quality on arrival	
REPORTING DETAILS	
Report ID	PCR117931
Ct value of (ORF1a/ORF1b/N/N2 Gene)	29
Ct value of (RdRp/S Gene)	

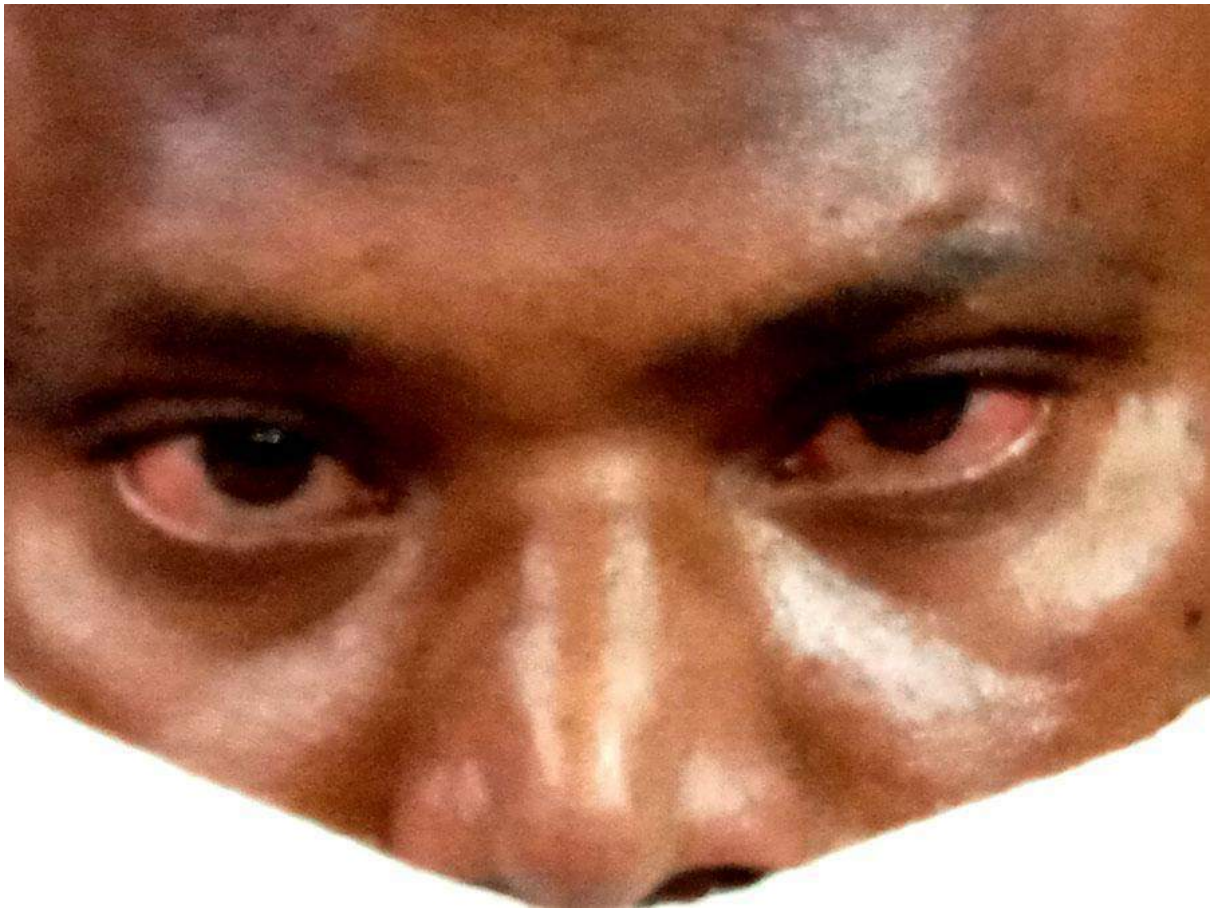
Sr. No.	Sample ID	Patient Name	Sex	Age	Specimen Type	Date of sample testing	Result 2019-nCoV
1	PCR117931	AJAY KUMAR SHAW	M	34	Nasopharyngeal Oropharyngeal	2021-05-04 15:20:14	Positive
Address	BHATTACHARYA STREET SERAMPORE						HOOGHLY

Medical College Kolkata
Prepared By

This is computer generated no signature required.

ote: The results relate only to the specimens tested and should be correlated with clinical findings.
terpretation guidance:-

- *Testing of referred clinical specimens was considered on the basis of request /referral received from /through State Surveillance Officer (SSO) of concerned State Integrated Disease Surveillance programme (IDSP)/ any other health care facility affirming requirements Of the case definition/s.*
- *A single negative test result, particularly if this is from an upper respiratory tract specimen, does not exclude infection*
- *Repeat sampling and testing of lower respiratory specimen is strongly recommended in severe or progressive disease. The repeat specimens may be considered after a gap of 2 — 4 days after the collection or the first specimen for additional testing if required. **
- *A positive alternate pathogen does not necessarily rule out either, as little is yet known about the role or coinfections.*
- *Please note that these results are not to be used for any thesis or presentations or for publication in any Journal without the prior permission of the Director General, ICMR*
- *This is a provisional report. For confirmation please contact the concerned laboratory or concerned Lab.*
- *In case of Covid-19 Positive Report -*
  - *Please contact for any information to*
    CORONA CALL CENTRE NUMBER – 1800313444222 / 033-23412600
    Telemedicine Help Line Number – 033-23576001
    Ambulance Call Center Number - 033-4090-2929
    For live audio video teleconsultation for COVID please download "eSanjeevaniopd" from google play store.



Assessment of Knowledge and Attitude Regarding Female and Male Breast Cancer among Adults of South India

Anwitha Johns, Satish Kumar B P & Lavanya P R

Adichunchanagiri University

ABSTRACT

Background & Objectives: Breast cancer is the second leading reason for cancer death in women. Incidence rates of male breast cancer have increased by 0.2- 1% per year. The lack of knowledge and awareness of male breast cancer leads to its detection at a late stage in men. This study is to assess the knowledge and attitude of south Indian adults towards male and female breast cancer.

Methods: To assess the knowledge and attitude of adults on breast cancer, a questionnaire regarding basic knowledge and attitudes was formulated using Google forms. Numbers and percentages were formed to review categorical and nominal data. Chi-square ($\chi 2$) test was used for the comparison between the awareness of female breast cancer and male breast cancer. $P < 0.05$ was set as the level of significance.

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Assessment of Knowledge and Attitude Regarding Female and Male Breast Cancer among Adults of South India

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ABSTRACT

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Results: A total of 352 respondents enrolled in the study. 248 (70.5%) were females and 104 (29.5%) were males. A good number of participants 340 (96.6%) were aware of female breast cancer and only 118 (33.5%) of the participants heard about male breast cancer. An unsatisfactory number of participants perform breast self-examination once a month and start mammogram screening at the age of 40.

Interpretation and Conclusions: Female breast cancer awareness was increased but lack of knowledge of screening techniques like breast self-examination and mammography doesn't decrease the prevalence of female breast cancer. Male breast cancer awareness was very poor and unsatisfactory. Educational training on screening techniques and community awareness programs should be conducted to decrease breast cancer prevalence.

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I. INTRODUCTION

Uncontrolled growth of epithelial cells in the breast is termed Breast cancer or breast carcinoma. There are different categories of breast cancer. The category of breast cancer is determined by which cells in the breast turn into cancer.

Breast cancer can initiate in different parts of the breast. Three main parts of the breast are lobules, ducts, and connective tissue. The lobules are the glands responsible for the production of milk. The tubes responsible for carrying milk to the nipple are ducts. The connective tissue environs and embraces everything together. Breast cancers mostly initiate in the ducts or lobules. When breast cancer spreads to other parts of the body through blood vessels and lymph vessels, it is referred to as metastasized(1).

There is a drastic increase in the incidence of Breast Cancer in previously low incidence areas such as Asia. Particularly in India, breast cancer is considered leading cancer among women in certain cities such as Mumbai, Bangalore & Thiruvananthapuram. According to the Indian Council of Medical Research-population Based Cancer Registry (ICMR-PBCR) information, breast cancer has turned into common cancer among females in urban registries of Delhi, Mumbai, Ahmedabad, Calcutta, and Trivandrum-(2).

In recent years, incidence rates of breast cancer have increased by 0.3% per year. After lung cancer, breast cancer is the second leading reason of cancer death in women. Probably 1 in 38 women die from breast cancer i.e about 2.6%. Recent studies confirm that breast cancer prevalence is increasing year by year(3)

Comparative to female breast cancer, male breast carcinoma is uncommon, with an incidence of 1 in 100,000 men, which is accounting for less than 1% of all cases of breast carcinoma. Incidence rates of male breast cancer have increased by 0.2-1% per year(4).

Because of low incidence and very low awareness of male breast cancer, no clinical studies are giving appropriate information on the optimal diagnostics and proper treatment and management for male breast cancer patients. Therefore, the currently used treatment recommendations are based on the guidelines of breast cancer in women. However, the lack of knowledge and awareness of male breast cancer leads to its detection at a late and advanced stage in men accompanying an untreatable prognostic outcome (5).

This study is considered based on the increasing incidence of women breast cancer and very poor awareness of male breast cancer among adults in India.

II. METHODS

2.1 Development and content of the Questionnaire

To assess the knowledge and attitude of adults (above the age of 18 years) on female and male breast cancer, an anonymous questionnaire with 15 questions regarding basic knowledge and attitudes was formulated using Google forms. The questionnaire was formulated in collaboration with an expert in the field. Simple random sampling was cast-off for picking the participants. Through email and WhatsApp, the link to the survey was circulated to the intended participants. The questionnaire was mainly focusing on the participant's responses to both male and female breast cancer. Lastly, it was inquired if the participant had any query on breast cancer. The questionnaire was kept live for eight weeks, and the individuals were reminded to fill it up.

Study Design: Observational cohort prospective study.

Study duration: October 2020 to December 2020.

Sample size

The minimum of 352 sample size was calculated using Raosoft software at a 95% confidence interval with a 5% margin of error and with a response rate of 70%.

Inclusion Criteria

South Indian adults (above the age of 18)

Exclusion criteria

People who were not interested to enrol in the study

Statistical analysis

Data was entered into Microsoft Excel spreadsheets and cross-checked for its accuracy. Obtained data were analysed using the IBM SPSS statistics software for windows, version 22 (Armonk, NY, USA). Numbers and percentages were formed to review categorical and nominal data. Variables used in the analysis included age, sex, education level and marital status. Besides, the Chi-square ($\chi 2$) test was used for the comparison between the awareness of female breast cancer and male breast cancer. $P < 0.05$ was set as the level of significance.

III. RESULTS

3.1 Socio-demographic characteristics

A total of 352 respondents enrolled in the study. Of this, 248 (70.5%) were females and 104 (29.5%) were males. The mean age of the respondents was 24.05±8.1 years, where more than half of the participants (80.4%) belongs to the age category 18-25 years and more than half of the participants (82.7%) were unmarried. Undergraduate (61.6%) and graduated (31.5%) participants were more in number. All the socio-demographic characteristics are detailed in (Table 1).

Table 1: Sociodemographic characteristics of the participants (N=352)

Variable	Participants (N)	Percentage (%)
Age in years		
18-25	283	80.4
26-35	30	8.5
36-45	24	6.8
46-55	14	4.0
56-65	00	0.0
66 and above	01	0.3
Sex		
Female	248	70.5
Male	104	29.5
Marital status		
Married	61	17.3
Unmarried	291	82.7
Education		
Illiterate	01	0.3
Primary education	04	1.1
Secondary education	19	5.4
Degree	217	61.6
Any higher education	111	31.5

3.2 Knowledge of the participants for breast cancer

Among 352 participants, a good number of participants 340 (96.6%) were aware of female breast cancer and only 118 (33.5%) of the participants heard about male breast cancer (fig 1). About 58.8% population knew about the most breast cancer affected age group. Family history was marked several times (57.4%) as the main reason for breast cancer, few (37.2%) marked for early menses/late menopause but very few (19%) thought that body weight would contribute to the breast cancer cause. 268 (76.1%) were unaware that men diagnosed with breast cancer are more likely to die when compared to women (fig 2). According to the survey, the majority of the partici- pants (74.7%) thinks breast cancer is a treatable disease. The complete information about knowle- dge for breast cancer is detailed in (Table 2).

Table 2: Knowledge of the participants for breast cancer (N=352)

Questions	Yes	No
1. Have you heard about female breast cancer and male breast cancer?		
a) Female breast cancer	340 (96.6%)	12 (3.4%)
b) Male breast cancer	118 (33.5%)	234 (66.5%)
2. Did you know 50 and above age groups are most affected by breast cancer?	205 (58.8%)	145 (41.2%)
3. What do you think about the main causes of breast cancer?		
a) Family history	202 (57.4%)	150 (42.6%)
b) Early menses/Late menopause	131 (37.2%)	221 (62.8%)
c) Bodyweight	67 (19%)	285 (81%)
d) Food/ Personal hygiene	163 (46.3%)	189 (53.7%)
4. Have you heard about Breast Self-Examination(BSE)?	218 (61.8%)	134 (38.1%)
5. Did you know the size differences of breasts in youths are not the main reason for breast cancer?	205 (58.2%)	147 (41.8%)
6. Did you know that Family history (inherited genetics) is the main reason for male breast cancer?	142 (40.3%)	210 (59.7%)
7. Did you know that men diagnosed with breast cancer are more likely to die when compared to women?	84 (23.9%)	268 (76.1%)
8. Do you think; breast cancer can be treated?	263 (74.7%)	89 (25.3%)

3.3 The attitude of the participants for breast cancer

Nearly 75% of the participants are willing to consult a doctor if they find any breast cancer symptoms. An unsatisfactory number of participants 30 (8.5%) perform breast self-examination once a month (fig 3). More than half of the participants (57.7%) are unaware of starting mammogram screening at the age of 40 (fig 4). The majority of the population (91.8%) doesn't consider breast cancer as a contagious disease and they do not avoid contact with breast cancer patients. The complete information about attitude for breast cancer is detailed in (Table 3).

Table 3: Attitude of the participants towards breast cancer (N=352)

Questions	Yes	No
1. Would you consult a doctor if you found with any of the breast cancer symptoms	261 (74.1%)	91 (25.9%)

2. Do you perform breast self-examination (BSE)?	131 (37.2%)	221 (62.8%)
3. Do you perform BSE once a month?	30 (8.5%)	322 (91.5%)
4. Do you avoid contact with breast cancer patients?	29 (8.2%)	323 (91.8%)
5. Are you aware of starting mammogram screening at 40 years?	149 (42.3%)	203 (57.7%)

Figure 1: Have you heard about female breast cancer and male breast cancer

Figure 1 shows that a good number of participants (96.6%) were aware of female breast cancer and only a few (33.5%) participants heard about male breast cancer. When the chi-square test is applied, the null hypothesis stating 'an equal percentage share of female breast cancer and male breast cancer awareness' is rejected.

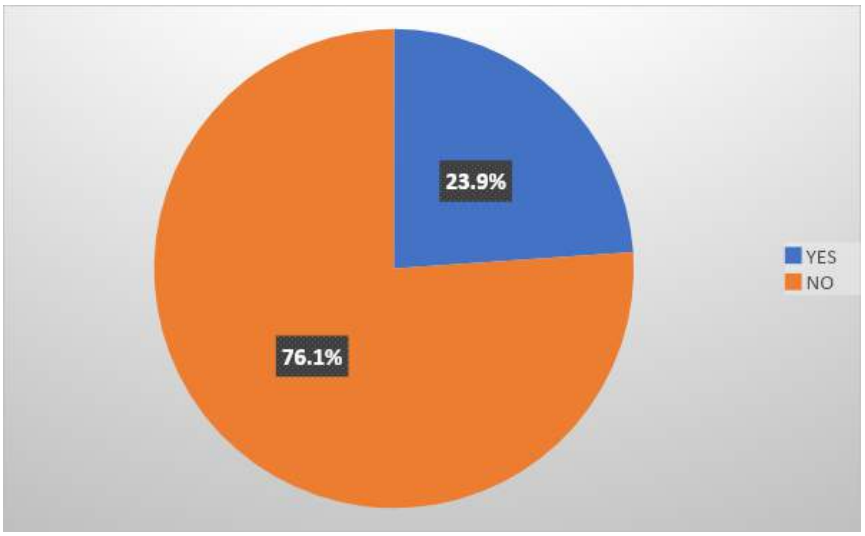

Figure 2: Did you know that men diagnosed with breast cancer are more likely to die when compared to women

Figure 2 shows that 76.1% of participants were unaware that men diagnosed with breast cancer are more likely to die when compared to women.

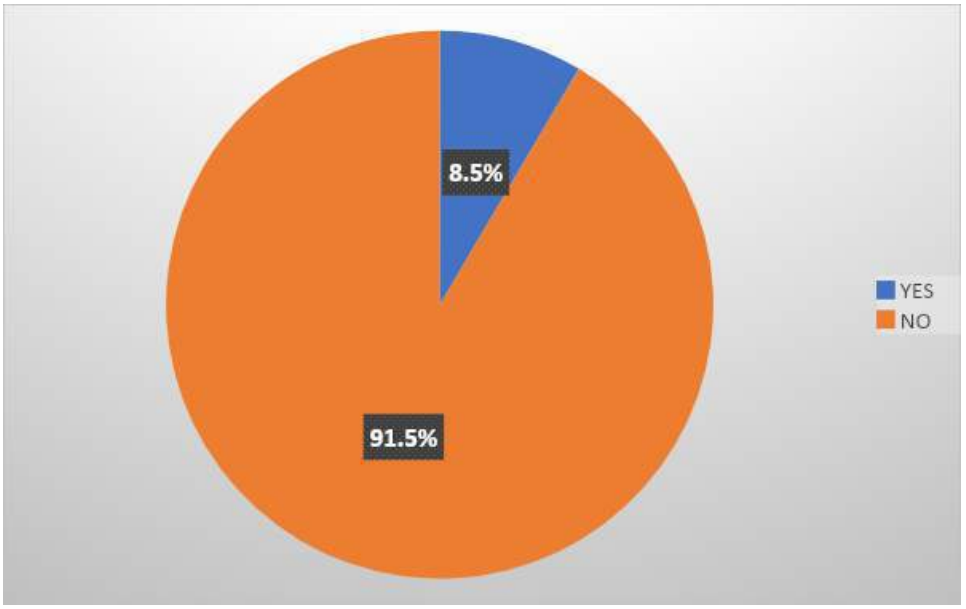

Figure 3: Do you Perform BSE once a month

Figure 3 explains, an unsatisfactory number of participants 30 (8.5%) perform breast self-examination once a month.

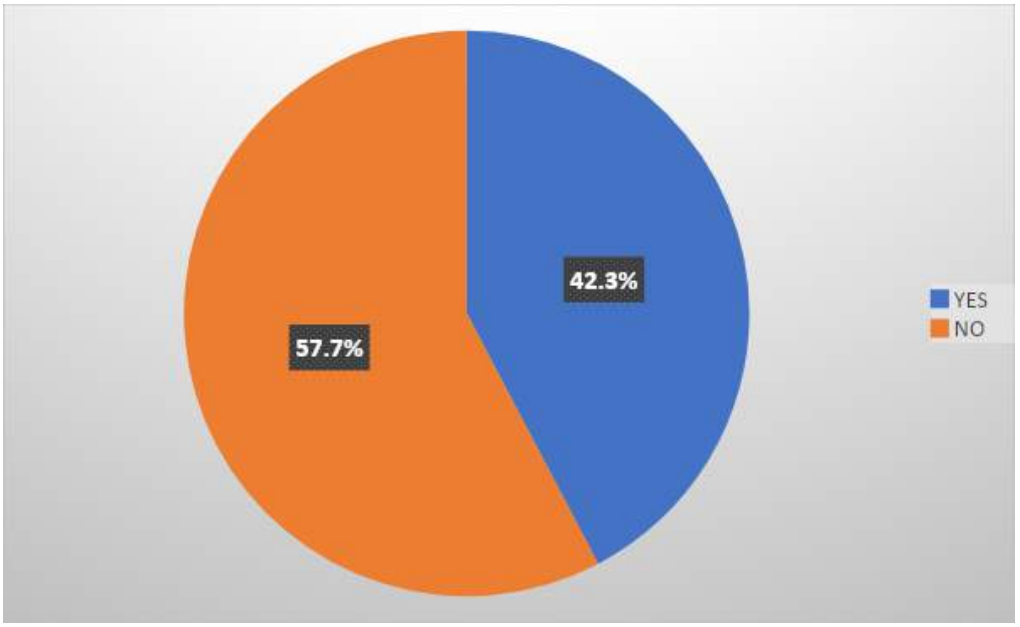

Figure 4: Are you aware of starting mammogram screening at 40 years

Figure 4 shows that more than half of the participants (57.7%) are unaware of starting mammogram screening at the age of 40.

IV. DISCUSSION

The purpose of the study is to assess the knowledge and attitude of South Indian adults towards female and male breast cancer and to estimate the awareness of female and male breast cancer. The need for the study is, breast cancer prevalence is increasing year by year and lack of awareness may be the reason for the increased prevalence. This study is believed to be the first of its kind in south India to assess awareness of male breast cancer in adults.

4.1 Knowledge of the participants for breast cancer

This study proves minimal knowledge and awareness of male breast cancer and maximum awareness of female breast cancer in south Indian adults. The last question in the questionnaire was to discuss if participants had any query on breast cancer and it proved that the majority of the participants were shocked to hear about male breast cancer. Most of the participants of the study were unaware that family history (inherited genetics) is the main reason for male breast cancer. The study conducted by Eileen Thomas showed nearly 80% of participants weren't aware that men can get breast cancer, and although all were at higher risk given their positive family history (6). Another study conducted by Jonathan White, Olive Kearins et.al, confirms the society opinion that the general public considers breast cancer as a female disease, and a diagnosis of male breast cancer is a sense of disbelief (7). The study conducted by Larissa A Korde, Jo Anne Zujewski et.al, states that education of both patients and healthcare professionals are required to increase awareness of male breast cancer, to direct evidence-based treatment, and to encourage clinical and biological studies intended at optimizing treatment for this rare disease (8).

4.2 The attitude of the participants for breast cancer

According to this study, the attitude of the participants towards breast cancer symptoms is satisfactory that the majority of the population consult a doctor if they found any breast cancer symptoms. The attitude towards the false belief, breast cancer is a contagious disease is very good that most of the participants do not avoid contact with breast cancer patients. But the attitude towards precautions and screening methods of breast cancer is very poor. According to the study by Ozgul Karayurt, Dilek Ozmen et.al, the females had inadequate knowledge about breast self-examination and a low percentage of participants reported that they had done breast self-examination monthly (9). The study by Ahmed BA concluded that only 17.4% of participants were performing breast self-examination (BSE). The most known method of breast cancer detection was BSE, still, the majority never practice it because of a lack of knowledge about the technique (10). According to the study by SumadiL Anwar et.al, Only 5% of participants were aware of mammogram screening as the breast cancer screening technique(11). The study by Yusra E Elobaid et.al showed, almost half (44.8%) of women never had a Clinical Breast Exam (CBE) and 44.1% of women who never had mammogram screening expressed ignorance about these screening techniques (12).

V. CONCLUSION

Female breast cancer awareness was increased and satisfactory but lack of knowledge of screening techniques like breast self-examination (BSE) and mammography doesn't decrease the prevalence of female breast cancer. Educational training on these screening techniques should be conducted to decrease breast cancer prevalence.

Male breast cancer awareness was very poor and unsatisfactory. The majority were shocked to hear about male breast cancer and unable to accept the fact that men diagnosed with breast cancer are more likely to die when compared to women. Community awareness programs should be conducted to avoid this shocking attitude towards male breast cancer and thereby reduce the prevalence of male breast cancer.

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Medical Treatment of Epilepsy in a Populous Suburban Village of Baku

Dr. Asadova Ulker Asker

ABSTRACT

Aim: During the period of clinical and epidemiological study of epilepsy among the population in the Mashtaga settlement of Baku city (2017-2019), the effect of optimization of antiepileptic therapy on the course of epilepsy in patients in the region was studied.

Material and methods: The work was carried out on the basis of the United City Hospital (UCH) No. 7 of the Mashtaga village and at the Department of Neurology of the Educational - Therapeutic Corps of the Azerbaijan Medical University. Optimization of therapy was carried out with antiepileptic drugs dispensed to patients by a local polyclinic institution. The Fisher test was used to assess the qualitative parameters. Correlation analysis was carried out using Pearson's rank correlation coefficient. The results are presented at the level of significant significance $p < 0.05$.

Keywords: epilepsy, etiological factors, antiepi- leptic therapy.

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Medical Treatment of Epilepsy in a Populous Suburban Village of Baku

Медикаментозное лечение эпилепсии в многонаселенном пригородном поселке города Баку

Dr. Asadova Ulker Asker

УЛЬКЕР АСКЕР КЫЗЫ АСАДОВА

диссертант кафедры неврологии Учебно Тер-Апевтического Корпуса Азербайджанского Медицинского Университета, представитель Азербайджанской Противоэпилептической Лигии Азербайджанского отделения Всемирной Организации Неврологов, председатель общества Красного Полумесяца Сабунчинского района города Баку, невролог Объединенной Городской Больницы №7 посёлка Маштага. Город Баку. Республика Азербайджан. AZ 1039, г. Баку, улица Ханлара 43.

РЕФЕРАТ

Цель исследования: В периоде клинико эпидемиологического исследования эпилепсии ср-еди населения в поселке Маштага города Баку (2017-2019 годы) изучено влияние оптимизации антиэпилептической терапии на течение эпилепсии у больных в регионе. Материал и методы. Работа выполнялась на базе Объединенной Городской Больницы (ОГБ) №7 посёлка Маштага и на кафедре неврологии Учебно Терапевтического Корпуса Азербайджанского Медицинского Университета. Оптимизацию терапии проводили противоэпилептическими препаратами, выдаваемыми больным местным поликлиническим учреждением. Для оценки качественных параметров использовали критерий Фишера. Корреляционный анализ проводился с использованием коэффициента ранговой корреляции Пирсона. Результаты представлены при уровне достоверной значимости p<0.05. Результаты и их обсуждение. После оптимизации больным АЭ терапии, ремиссия в течение 2 лет наблюдалась у 116(58.9%) пациентов (χ2=1, 376; p=0,012); в течение 6-9 месяцев – у 42(21.3%) больных (χ2=2,328; p=0,007); у 39(19.8%) пациентов эффект отсутствовал (χ2=4, 12 5; p=0,039). В исследовании, карбамазепин, назначенный больным симптоматическими формами эпилепсии (24 (32.8%) больных ВЭ и 22 (57.9%) – с ЛЭ) в качестве монотерапии, обладал лучшей переносимостью. Положительный эффект наблюдался: у 8 (10.9%) больных ВЭ, принимавших карбамазепин в сочетании с левет- ирацетамом; у 9 (12.3%) пациентов ВЭ и у такого же количества больных с ИГЭ, получавших битерапию карбамазепина с вальпроевой кислотой; у 5(6.8%) больных ВЭ и 10(26.3%) –ЛЭ, использовавших карбамазепин с топираматом. Выводы. Успешная оптимизация антиэпилептической терапии, пропаганда здорового образа жизни, будут резервом в снижении перинатальных повреждений головного мозга, ЦВП, ЧМТ и, связанной с ними инвалидизации больных эпилепсией в посе лке, как с детства, так и в работоспособном возрасте.

Ключевые слова: эпилепсия, этиологические факторы, антиэпилептическая терапия.

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ABSTRACT

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Results and discussion: After optimization of patients with AE therapy, remission within 2 years was observed in 116 (58.9%) patients (χ2=1,376; p=0,012); within 6-9 months - in 42 (21.3%) patients (χ2=2,328; p=0,007); 39 (19. 8%) patients had no effect (χ2=4,125; p=0,039). In the study, carbamazepine prescri- bed to patients with symptomatic forms of epilepsy (24 (32.8%) patients with TLE and 22 (57.9%) with FLE) as monotherapy was better tolerated. A positive effect was observed: in 8 (10.9%) patients with TLE who took carbama-zepine in combination with levetiracetam; in 9 (12.3%) patients with TLE and in the same number of patients with IGE who received biterapy of carbamazepine with valproic acid; in 5 (6.8%) patients with TLE and 10 (26.3%) with FLE, who used carbamazepine with topiramate.

Conclusions: Successful optimization of antiepileptic therapy, promotion of a healthy lifestyle will be a reserve in reducing perinatal brain damage, CVP, TBI and related disability of epilepsy patients in the village, both from childhood and at working age.

Keywords: epilepsy, etiological factors, antiepileptic therapy.

I. ВВЕДЕНИЕ

В настоящее время в мире проблема эпилепсии актуальна как никогда. Заболевание имеет огромное значение, в связи с его высокой распространенностью, социальной значимостью и важными экономическими аспектами. Кроме того, будучи универсальной, она встречается повсеместно, поражая людей разных рас и национальностей. Однако ее эпидемиологические показатели существенно различаются в разных исследуемых популяциях. Чтобы добиться максимально возможного контроля над данным заболеванием, необходимо использовать биологически, психологически и социально обоснованный медикаментозный подход к больным эпилепсией. Определенный порядок лечения эпилепсии сложился еще в 50-е годы XX века и включал в себя следующие положения: адекватное начало лечения, индивидуальность, комплексность, преемственность, непрерывность, длительность. В основном, принцип лечения эпилепсии исходит из клинической формы заболевания и типа припадков [1, 2]. Целью фармакотерапии является предотвращение припадков без воздействия на нормальный ход процессов мышления, без отрицательных системных эффектов с обеспечением постоянной адекватной концентрации АЭП в крови [3-5]. На сегодняшний день достичь контроля эпилептических припадков удается у 70-80 % больных, а медикаментозной ремиссии у 60-80% пациентов. До появления современных АЭП ремиссия эпилепсии отмечалась лишь в 30% случаев. Однако проведенные в последние десятилетия проспективные длительные популяционные исследования указывают на более благоприятное положение, что позволяет с большим оптимизмом относиться к прогнозу лечения эпилепсии [6, 7].

Цель работы: изучить влияние оптимизации противоэпилептической терапии на течение эпилепсии у больных в популяции поселка Маштага города Баку.

II. МАТЕРИАЛ И МЕТОДЫ ИССЛЕДОВАНИЯ

Изучение влияния оптимизации противоэпилептической терапии на течение эпилепсии у больных в регионе проводилось в периоде клинико-эпидемиологического исслед-ования эпилепсии среди населения в поселке Маштага города Баку (2017-2019 годы). Работа велась согласно протоколу Этического Комитета №11 Азербайджанского Медицинского Университета (АМУ) от 29 декабря 2019 года и руководству по проведению эпидемиологических исследований, подготовленном комиссией по эпидемиологии и прогнозу Международной Противоэпилептической Лиги (1993) [8]. Когортное прои ретроспективное исследование эпидемиологии эпилепсии с учетом этиологических и социальных аспектов проводилось на основании данных обращаемости в амбулаторно-поликлиническое учреждение посёлка Маштага Сабунчинского района за период от 2016 по 2019 годы. Случаи активной эпилепсии регистрировали по результатам по дворовых обходов, сплошного изучения медицинских амбулаторных карт объединенного детского и взрослого поликлинического отделения ОГБ №7, карт регистрации вызовов местной станции скорой медицинской помощи №14. Оптимизацию противоэпилептической терапии проводили такими препаратами, как вальпроевая кислота (300 мг, 500 мг), наварин (500 мг), карбамазепин (200 мг), ламотриджин (25 мг, 50 мг, 100 мг), топирамат (50 мг, 100 мг), фенобарбитал (100 мг), которые выдавались больным в местном поликлиническом отделении ОГБ №7 и леветирацетмом, пролонгированными формами депакина, карбамазепина, приобретаемыми пациентами за счет собственных средств. Также были определены возраст, пол больных, их неврологическая симптоматика, дебют и причины заболевания, изучен характер медикаментозной терапии в начале исследования и после оптимизации. При впервые выявленной эпилепсии, а также для уточнения диагноза проводилось клинико неврологическое обследование, включающее осмотр неврологом, электроэнцефалографическое (ЭЭГ), магнитно резонансное (МРТ) и компьютерно томографическое (КТ) исследования.

Диагноз и семиология типов припадков определялись в соответствии с Международной классификацией эпилепсии и эпилептических синдромов (ILAE) (Нью-Дели, 1989 год), и типов приступов (Киото 1981 год). Изучение ауры проводилось на основании классификации, разработанной в Cleveland Clinic Foundation, Ohio, USA (2001 год). [9].

Для расчета интенсивных показателей использовались данные о численности и половозрастной структуре обслуживаемого населения, предоставленные поликлин- ическим отделением ОГБ №7 для взрослого и детского населения Сабунчинского района города Баку, а также данные переписи населения Республики Азербайджан 2019 года.

Для статистической обработки использовали алгоритмы программы Statistica 6.0 (Stat Soft Inc., USA); для оценки качественных параметров – критерий Фишера. Корреляционный анализ проводился с использованием коэффициента ранговой корреляции Пирсона. Результаты представлены при уровне достоверной значимости $p < 0.05$.

III. РЕЗУЛЬТАТЫ ИССЛЕДОВАНИЯ

В период исследования (2016-2019 годы) в поселке Маштага проживало 45800 жителей, из которых 23700 мужчины и 22100 - женщины. Коренное население составляло 37505, а некоренное - 8295 человек. Представители коренного населения проживали в поселке компактно в трех кварталах (мехелле): хунхар (потомки гуннских тюрков), кечан (потомки массагетов), сеидлер (потомки арабов). [10, 11]. Некоренные жители переселились в поселок из различных районов республики. В исследуемой популяции 197 больных (121 (61,4%) мужчин, 76 (38.6%) женщин), страдали различными формами эпилепсии, среди которых большая часть приходилась на долю локализационно – обусловленных эпилепсий - 129 человек (65.4%). При этом идиопати-

ческая форма фокальной эпилепсии наблюдалась в 16 случаях (6.8%), симптоматическая фокальная форма - в 113 случаях (47.7%). Генерализованной эпилепсией страдали 68 больных (33.5%). Среди них идиопатические формы генерализованной эпилепсии (ИГЭ) наблюдались у 63 (92.6%), симптоматические (СГЭ) - у 3 (4.4%) и криптогенные (КГЭ) у 2(2.9%) пациентов. (рисунок 1)

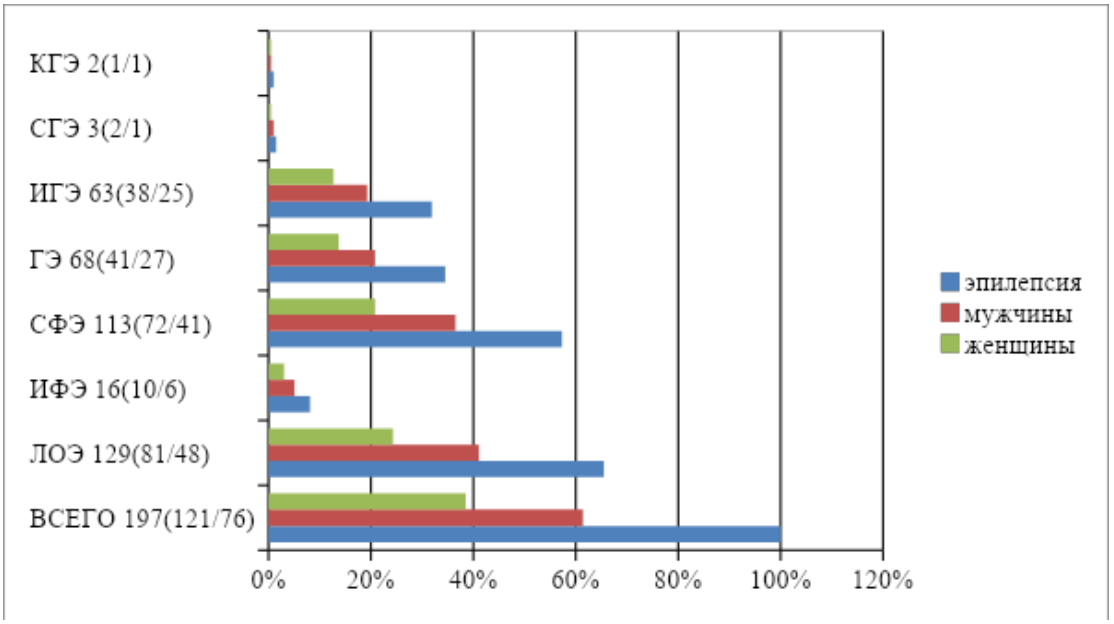

Рисунок 1: Гендерная характеристика структуры эпилепсии

В периоде исследования, при сборе анамнеза у больных с различными формами эпилепсии проводился опрос по поводу принимаемого противоэпилептического лечения. Выяснилось, что 22 (30.1%) больных с ВЭ получали АЭП в виде политерапии. Монотерапию карбамазепина получали 8 (10.9%) пациентов с ВЭ, а вальпроевой кислоты – 6 (8.2%) больных. 7 (9.6%) пациентов с ВЭ принимали монотерапию карбамазепина в сочетании с нейролептиками, а 8 (10.9%) больных с ВЭ сочетали прием вальпроевой кислоты с препаратами по поводу сопутствующих заболеваний (гипертоническая болезнь, холецистит, сахарный диабет, патология щитовидной железы и др.). 4 (10.8%) больных ВЭ отказались от противоэпилептической терапии и принимали лечение только по поводу соматического заболевания. Битерапию в форме сочетания карбамазепина и вальпроевой кислоты получали 18 (48.6%) больных с ВЭ. Больные с ЗЭ 4(100%) получали монотерапию карбамазепином. Больные с ТЭ (2 (100%) случая) комбинировали монотерапию карбамазепином с антидепрессантами и нейролептиками. Пациенты с ЛЭ (17 (44.7 %) человек) получали политерапию в комбинации карбамазепина с вальпроевой кислотой и топироматом. 9 (23.7%) же больных Л Э – битерапию карбамазепина с вальпроевой кислотой. 12 (31.6%) больных с ЛЭ отказались от противоэпилептического лечения по причине его неэффективности. Пациенты с идиопатической парциальной эпилепсией (8 (57.1%) человек) получали карбамазепин в монотерапии, а остальные 6 (42.9%) человек лечения не получали. 3 (100%) пациента с медиальным склерозом височной доли были фармакорезистентными. Больные с идиопатической генерализованной эпилепсией в качестве лечения получали вальпроевую кислоту в монотерапии (35 (55.6%) человек) и 28 (44.4%) человек - битерапию вальпроевой кислоты с карбамазепином.

Эффект от применявшихся лекарств был положительным у 17 (23.3%) пациентов с ВЭ, получавших битерапию: карбамазепин с

вальпроевой кислотой (9 (24.3%) человек) и монотерапию карбамазепином (8(22.2%) человек). Медикаментозная ремиссия наблюдалась у всех пациентов с ЗЭ. У пациентов же с ТЭ наблюдалось сокращение количества припадков до 1-2 раз в месяце. Пациенты с ЛЭ (10 (26.3%) человек), получавшие политерапию, были резистентны к ней. У 7 (18.4%) же из них припадки стали реже, до 3-4 раз в месяце. У больных с идиопатической генерализованной эпилепсией, принимаю щих только вальпроевую кислоту наблюдалась стойкая ремиссия припадков, а ее комбинацию с карбамазепином (19 (30.2%) человек) – сокращение числа припадков до 1-2 раз в 4 – 5 месяцев. Остальные 9 (23.7%) пациентов из-за продолжающихся приступов не были довольны назначенным лечением. Больные РЭ (6 (42.9%)), не получающие АЭ терапию, не жаловались на частые приступы и к возможному назначению АЭП реагировали неохотно. У пациентов же с РЭ, получающих карбамазепин, припадки повторялись раз в 2-3 месяца.

Как видно из таблицы №1, во время исследования 56 (71.2%) пациентам ВЭ, 22 (57.9%) больным с ЛЭ, 8 (57.1%) – РЭ, 9 (14.3%) больным с ИГЭ была проведена коррекция противоэпилептической терапии. Так, 20 (27.4%) больных ВЭ были переведены на монотерапию карбамазепина. Среди них 10 (13.7%) пациентов стали получать его пролонгированную форму. 4(10.8%) больным ВЭ, отказавшимся от лечения, также был назначен карбамазепин в виде монотерапии. Битерапию в форме сочетания карбамазепина с вальпроевой кислотой в виде ее дюрантной формы стали получать 10 (13.7%) пациентов ВЭ. Пациенты с ВЭ (22 (30.1%)), принимавшие политерапию в форме сочетания АЭП первого выбора с препаратами нового поколения, были битерапии. Карбамазепин с топираматом переведены на их сочетание в форме стали получать 5 (6.8%) больных ВЭ; с леветирацетамом – 8 (10.9%) больных; с ламотриджином – 2 (2.7%) пациентов. Вальпроевую кислоту с леветирацетамом стали получать 5 (6.8%) больных ВЭ, а с ламотриджином – 2 (2.7%) больных. Больным с РЭ (8 (57.1%)) карбамазепин был заменен на вальпроевую кислоту в соответствующей минимальной дозировке. Пациенты с ЛЭ (10 (26.3%) человек), после отмены вальпроевой кислоты были переведены с политерапии на битерапию карбамазепина с топираматом с коррекцией дозировки последних препаратов. 12 (31.6%) больным ЛЭ была рекомендована вальпроевая кислота в монотерапии и в соответствующей дозировке. 9 (14.3%) больных ИГЭ стали получать ВПА в дозировке, соответствующей весу.

Таблица №1: Характер оптимизации терапии больным эпилепсией

Характер терапии	Больные с различными формами эпилепсии			
	ВЭ	ЛЭ	РЭ	ИГЭ
монотерапия	20*+4 КБ	12 ВПА	8 ВПА	9 ВПА (доза)
Битерапия КБ+ВПА	10	0	0	0
Битерапия КБ+новые АЭП	5+Т 8+ ЛЕВ 2+ЛМ	10 КБ+Т	0	0
Битерапия ВПА+новые АЭП	5+ ЛЕВ 2+ ЛМ	0	0	0

Примечание: КБ-карбамазепин, ВПА-вальпроевая кислота, ЛЕВ-леветирацетам, ЛМ-ламотриджин, Т-топирамат;
*-количество больных.

После оптимизации больным АЭ терапии, ремиссия в течение 2 лет наблюдалась у 116(58.9%) пациентов (χ2=1,376; p=0,012); в течение 6-9 месяцев – у 42(21.3%) больных (χ2=2,328; p=0,007); у 39(19.8%) пациентов эффект отсутствовал (χ2=4,125; p=0,039) (таблица №2).

Таблица № 2: Спектр результатов терапии у больных эпилепсией до и после ее оптимизаци

Виды эпилепсии	Эффект терапии до и после оптимизации n=197				Отсутствие эффекта
	Ремиссия> 2лет		Ремиссия 6-9 месяцев		
	до	после	до	после	
ВЭ	17(24.6%)	+11(15.9%)	-	+18(26.1%)	23(33.3%)
ЛЭ	7(18.4%)	-	-	+22(57.9%)	9(23.7%)
ЗЭ	4(100%)	-	-	-	0
ТЭ	-	-	2(100%)	-	0
КГЭ	-	-	-	-	2(100%)
СГЭ	-	-	-	-	3(100%)
ИФЭ	6(42.9%)	+8(57.1%)	-	-	2(14.3%)
ИГЭ	54(85.7%)	+9(14.3%)	-	-	0
Всего:	88(44.7%)	+28(14.2%)	2(1.0%)	+40(20.3%)	39(19.8%)
χ2; p	χ2=1,376; p=0,012		χ2=2,328; p=0,007		χ2=4,125; p=0,039

IV. ОБСУЖДЕНИЕ

В исследовании, карбамазепин, назначенный больным симптоматическими формами эпилепсии (24 (32.8%) больных ВЭ и 22 (57.9%) – с ЛЭ) в качестве монотерапии, обладал лучшей переносимостью и меньшим потенциалом межлекарственных взаимодействий при сопоставимой эффективности. Среди них 10 (13.7%) больных ВЭ получали его пролонгированную форму. По данным литературы, при симптоматических и предположительно симптоматических фокальных эпилепсиях, составляющих более половины всех эпилептических расстройств, карбамазепин в монотерапии эффективен в 60–85% случаев, причем у половины пациентов достигается полное прекращение припадков [6, 7, 12]. Положительный эффект наблюдался также у 8 (10.9%) больных ВЭ, принимавших карбамазепин в сочетании с леветирацет амом; у 9 (12.3%) пациентов ВЭ и у такого же количества больных с ИГЭ, получавших битерапию карбамазепина с вальпроевой кислотой; у 5(6.8%) больных ВЭ и 10(26.3%) – ЛЭ, использовавших карбамазепин с топираматом. По данным литературы, леветирацетам имеет низкий потенциал лекарственных взаимодействий (с другими АЭП и средствами из других групп препаратов) по сравнению с другими антиконвульсантами, что крайне важно при полифармакотерапии [13]. А топирамат при лечении парциальных припадков, резистентных к терапии, начинает проявлять свою эффективность при сочетании с карбамазепином, если применяется в суточной дозе 200 мг. [14]. Отсутствие эффекта у 39 (36.9%) пациентов, подтверждает результаты ряда исследований о том, что различные формы эпилепсии не одинакого поддаются терапии. Например, ВЭ не только самая распространенная форма симптоматической эпилепсии, но и одна из самых труднокурабельных, особенно при наличии у больного МСВД [6, 7, 15-17]. Приступы же у больных ЛЭ, обычно тоже бывают резистентными к традиционным АЭП, если исходят из дополнительной моторной зоны, вследствие чего рассматривается хирургический вариант их лечения.

Оптимизация АЭ терапии больным эпилепсией проводилась узким ассортиментом АЭП (карбамазепин, депакин, топепсил, редко – ламотриджин), выдающимся им из поликлиники. Возможно, отсутствие эффекта от проведенной оптимизации АЭ терапии у

больных КГЭ и СГЭ, связано с этим тоже. Нельзя не учитывать в качестве причины слабого результата оптимизации терапии и низкий социально-экономический уклад в поселке (отсутствие предприятий и рабочих мест) с соответствующей трудоустроенностью населения, в том числе и больного, недостаточные материальные возможности которого были непозволительны для широкого использования пролонгированных форм базисных препаратов, АЭП нового поколения. По имеющимся данным из литературы, экономические причины являются частой причиной неполучения адекватной помощи. Из 50 миллионов больных эпилепсией в мире 35 миллионов не получают лечение по причине недостатка денег, особенно актуальна это проблема в развивающихся странах, в которых от 60% до 90% больных эпилепсией не получают адекватной терапии [18, 19].

Заключение. В проведенном исследовании с выявленными причинами неадекватной противоэпилептической терапии можно встретиться и во множестве ранее проведенных исследований. Лучшим выходом из сложившейся ситуации является успешная оптимизация противоэпилептической терапии, своевременная, правильная подготовка как здоровых, так и больных эпилепсией женщин к беременности и родам, активная проп- аганда здорового образа жизни, которые, в свою очередь, будут резервом в снижении перинатальных повреждений головного мозга, ЦВП, ЧМТ и, связанной с ними инвалидизации больных эпилепсией в поселке, как с детства, так и в работоспособном возрасте.

V. УЧАСТИЕ АВТОРОВ

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