PROFILE OF STROKE PATIENTS ADMITTED TO AZADI TEACHING HOSPITAL IN DUHOK

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ABSTRACT

Background: Stroke remains an outstanding worldwide disease process that results in high mortality and significant mental and physical disabilities. Stroke inflicts profound economic burden on both individual and governmental budgets.

Patients and Methods: This study has been designed to describe the profile of stroke patients in our locality. A cross sectional study design with consecutive sampling procedure were used to enroll nine hundred fifty patients who were admitted the Neurology Ward of Azadi General Teaching Hospital in Duhok during the period between January and December 2014. A suitable data sheet was designed to accommodate the relevant patient's data. Patients suspected of having vascular anomalies and / or neoplastic lesions and traumatic cases were excluded.

Results: Out of 950 patients, the females were 510 (53.7%) age range 23-105 years (mean 63.9±SD 13.1 years), while the rest were 440 (46.3%) males, age range 25-98 years (mean 65.4±SD 13.1years). The majority of patients 684 (70%) had their ages between 50-79 years. There were 803 (84.5%) ischaemic strokes, while haemorrhagic strokes accounted for 147 (15.5%) of cases. The patients' populations suffering identifiable RFs were as follow: obesity 734 (77.3%), hypertension 568 (59.8%), hyperlipidaemia 235 (24.7%), smoking 191 (20.1%), previous stroke 190 (20%), heart disease 153 (16.1.3%), diabetes mellitus 77 (8.1 %). Although 21 (2.2%) patients had no gross identifiable RFs, however, the rest of patients had one or more apparent risk factors. Regarding outcome during the admission period, 133 (14%) patients had died; mortality rate among ischaemic stroke had been 86/803 (10.7%) while among haemorrhagic stroke 47/147 (32%).

Conclusions: The findings in this study show many similarities to other studies worldwide. Although the present study has thrown the light on few common risk factors for stroke, both of modifiable and non-modifiable nature, at a tertiary referral teaching hospital in Duhok City, which includes a multiethnic community, it is recommended that further detailed and well-designed medical and statistical research to be conducted in this community in order to study genetic predisposition to stroke, setup preventive measures, implement proper management protocols aiming at improving the outcome, and directing health authorities planning health services for those surviving the stroke disorder.

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Keywords: Stroke; Common risk factors; Azadi General Hospital (Teaching).

Stroke standing as a distinguished clinical entity and referral to general hospitals worldwide, affects different age groups of both sexes with significant mortality and morbidity. Brain stroke remains one of the leading causes of mortality and disability worldwide. In general, many risk factors (RFs), associated with this disease process are identifiable and can be, at least, modified to a certain extent, such as hypertension (HTN), diabetes mellitus (DM),

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hyperlipidaemia (HL), obesity, and smoking.

Researchers have found that stroke is a major cerebrovascular disease resulting in high mortality and persistent disability in adults across the world. Besides coronary heart disease and cancer, stroke is the commonest cause of death in most industrialized countries. Survivors of stroke are often left with severe mental and physical disabilities, which create a major social and economic burden, ranking as the second most common cause of death worldwide and a major source of morbidity. Stroke is becoming a rapidly increasing problem and an important cause of illness and deaths in Saudi Arabia. However, compared with the developed countries, research regarding the incidence, prevalence and their socio-demographic properties of stroke is still insufficient due to lack of appropriate studies being conducted in these specified areas [1].

Stroke incidence rises steeply with age; therefore, stroke in younger people is less common; however, stroke in a young person can be devastating in terms of productive years lost and impact on a young person's life [2]. Stroke is the second leading cause of death in the world. In the Middle East and North Africa stroke is increasingly becoming a major health problem, with projections that deaths from it will nearly double by 2030 [3].

This cross sectional study deals with the clinical profile and gross risk factors that have background in the causation of stroke. It is a teaching-hospital-based study that describe gender, age, type of stroke, number of RFs, and outcome. Many other relevant current concepts have been mentioned.

PATIENTS AND METHODS

Nine hundred and fifty patients qualified for the study. They have been admitted to the Neurology Wards at Azadi Teaching Hospital (ATH), in Duhok City, Region of Kurdistan, North of Iraq, over one year period between January 2014-December 2014. The patients came, mainly, from various cities and towns of Duhok and Mosul Governorates and are of various ethnic groups.

When the patients with stroke present to the Accident and Emergency Departments of Accident and Emergency Hospital and ATH, history is taken from the patient or his/her relatives, examined, resuscitated, and stabilized. Then a non-contrast, computed tomography (CT) scan is arranged to disclose the type of stroke (Figure1). Routine blood tests are taken including the bleeding profile, complete blood picture, serum electrolytes and lipids. Following the laboratory tests, the patient is seen by the specialist neurologist and is either admitted to the medical Intensive Therapy Unit or the Neurology Ward at ATH depending on the clinical status where appropriate treatment is received. The magnetic resonance imaging (MRI) is usually arranged on the following days including T1W, T2W, FLAIR, and Diffusion Weighted phases (DWI) (Figure2); however, both, the MR angiography and venography (MRA/V) are performed whenever the clinicians find appropriate. Patients, whose latter tests show the possibility of having an aneurysm, an arteriovenous fistula, or tumour, or other neurosurgical disorder,

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are referred for conventional angiography outside the region and were excluded from the study. Few patients, however, have had carotid Doppler studies done for them. Since the vast majority of patients had their stroke in the cerebral hemispheres, and to a lesser extent in the brain stem and cerebellum, the term stroke has been generalized on all of the brain strokes.

In the context of defining some of the RFs, obesity is considered when body mass index is ≥30 kg/m2, including overweight and obesity type I & II; hypertension (HTN) when the blood pressure is ≥ 130/90 mm Hg or history of HTN; hyperlipidaemia (HL) when the serum levels of cholesterol ≥ 200mg/dL, or triglycerides ≥ 160 mg/dL, or high density lipoproteins (HDL) cholesterol of <40 mg/dL; heart diseases (HD), e.g. history of ischaemic heart disease (angina and myocardial infarction), atrial fibrillation, cardiac myopathy, etc.; diabetes mellitus (DM) when the fasting serum blood sugar exceeds 100 mg/dL; and renal impairment (RI) when both blood nitrogen urea and serum creatinine levels exceed 60 mg/dL and 1.3 mg/dL respectively. Smoking means those patients with habitual smoking of ≥ 10 cigarettes per day while alcohol stroke those who currently drink ≥1 drink per week and ≤2 drinks per day. Some patients were found to have suffered previous stroke (PS). We did not perform any post-mortem or neural tissue histopathological tests.

RESULTS

Four hundred seventy-six (50.1%) patients came from Duhok City; the rest (49.9%) came from other towns and cities of Duhok and Nineveh Governorates, (Table1).

Table 1: Study sample by residence.

Residency	Number of patients	%
Duhok City	476	50.1%
Other cities of Duhok and Nineveh Governorate	474	49.9%
Total	950	100%

The main bulk of strokes has occurred between 40-89 years of age, (Table 2).

Table 2: Study sample by age group and gender

Age groups (years)	Male patients	Female patients	Total No (%)
20-29	6	8	14 (1.5%)
30-39	8	6	14 (1.5%)
40-49	30	42	72 (7.6%)
50-59	70	107	177 (18.6%)
60-69	135	147	282 (29.7%)
70-79	108	115	225 (23.7%)
80-89	73	76	149 (15.7%)
90-105	10	9	19 (2%)
Total	440(46.3%)	510(53.7%)	950 (100%)

There were 440 male (46.3%) and 510 female (53.7%) patients with stroke, (Table3).

Table 3: Summary statistics for the mean age by gender

Gender	Number (%)	Age (years)	Mean age ± SD	P* Value
Males	440 (46.3%)	25 – 98	65.4±13.1	0.079
Females	510 (53.7%)	23 – 105	63.9±13.1	
Total	950 (100%)			

***Based on unpaired t-test.**

According to type of stroke, patients were divided into two groups, (Table4): ischaemic stroke (IS) accounted for 803 (84.9%) cases, while 147 patients (15.1%) had hemorrhagic stroke (HS).

Table 4: Study sample by type of stroke

Type of stroke	Number of patients	%
Ischemic stroke	803	84.5%
Haemorrhagic stroke	147	15.5%
Total	950	100%

RFs for stroke in patients involved in this study, in decreasing frequency, (Table 5): obesity 734 (77.3%), HTN 568 (59.8%), HL 235 (24.7%), smoking 191(20.1%), previous stroke (PS) 190 (20%), HD 153 (16.1%), RI 25 (2.6%), and alcohol intake accounting for 8 (0.8%) patients.

Table 5: Study sample by Risk factors (RFs)

Risk factor*	Number of patients	%
Obesity (overweight, obesity type I&II)	734	77.3%
Hypertension	568	59.8%
Hyperlipidaemia	235	24.7%
Smoking	191	20.1%
Previous stroke	190	20%
Heart diseases (atrial fibrillation, ischaemic heart disease, cardiac myopathy, etc.)	153	16.1%
Diabetes mellitus	77	8.1%
Renal impairment	25	2.6%
Alcohol intake	8	0.8%

*Note: Many patients have more than one RF (see table 6).

Table 6, illustrates the numbers of RFs for patients included in the current study: 21 (2.2%) of patients were free of RFs for strokE, 134 (14.1%) had only one RF, 294 (30.9%) had two RFs, 319 (33.6%) three RFs, 140 (14.7%) four RFs.

Table 6: Study sample by the number of risk factors and gender

Number of RFs	Number of patients			
	Males	Females	Total	%
No risk factor	11	10	21	2.2%
One risk factor	70	64	134	14.1%
Two risk factors	148	146	294	30.9%
Three risk factors	132	187	319	33.6%
Four risk factors	65	75	140	14.7%
Five risk factors	9	26	35	3.7%
Six risk factors	4	2	6	%
Seven risk factors	1	-	1	%
Total	440	510	950	100%

Of the total 950 patients, 133(14%) died during their admission period. The mortalities were obviously higher in patients with HS (32%) compared to those with IS (10.7%), (Table 7).

Table 7. Mortality rate by type of stroke

Type of cerebral stroke	Number of patients	Number of mortalities (%)	P *
Ischaemic stroke	803	86 (10.7%)	< 0.001
Haemorrhagic stroke	147	47 (32%)	
Total	950	133 (14%)	

**Based on Z-test for proportions.

Relation of number of RFs with the mortality rate (MR) is shown in table 9; MR was only 3/21 (14.3%) in patients with no RFs, 13/143 (9.7%) in patients with history of one RF, 33/294 (11.2%) in patients with two RFs, 54/319 (15.5%) in those with 3 RFs, and 30/175 (36.4%) in patients with more than 3 RFs.

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Table 9. Mortality the number of risk factors

Number of RFs	Total	Mortality	%
No RF	21	3	14.3%
One RF	134	13	9.7%
Two RFs	294	33	11.2%
Three RFs	319	54	15.5%
Four RFs	140	23	16.4%
Five RFs	35	7	20%
Six RFs	6	-	-
Seven RFs	1	-	-
Total	950	133	-

The patients' population comes from two governorates in the north west of Iraq, namely Duhok and Nineveh Governorates (Table 1). Although the dominant ethnic group is the Kurdish one, however, other ethnic groups are also represented in the study, e.g. the Arabs, Christians, and Turkuman. Therefore, we can consider the present study having multiethnic profile.

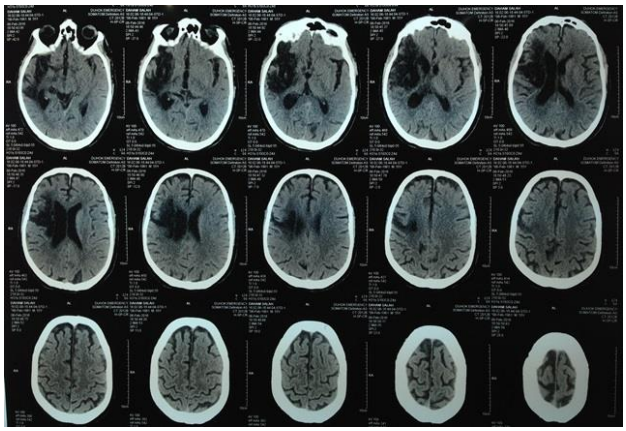
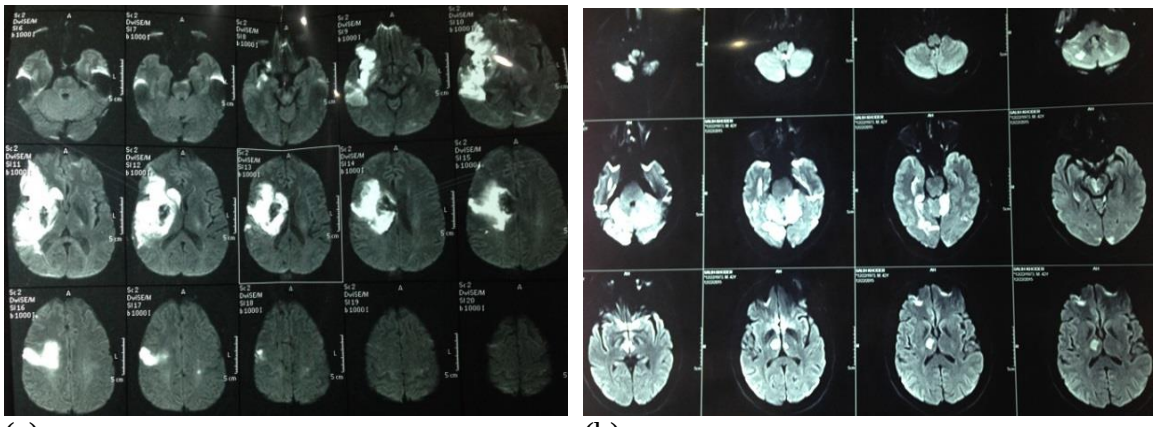


Figure 1: (a) An acute computed tomography scan of the head showing acute ischaemic infarction in the territory of the right middle cerebral artery,



(a) (b)

Figure 2: (a) Diffusion-weighted magnetic resonance image of the head of the same patient. (b) MRI of the brain showing multiple ischaemic cerebral infarctions affecting cerebral hemispheres, occipital lobes, right temporal lobe, both thalami, midbrain, and both cerebellar hemispheres. The patient survived the event.

DISCUSSION

Stroke is a major cerebrovascular disease resulting in high mortality and persistent disability in adults across the world. Besides coronary heart disease and cancer, stroke is the commonest cause of death in most industrialized countries. Survivors of stroke are often left with severe mental and physical disabilities, which create a major social and economic burden, ranking as the second most common cause of deathworldwide and a major source of morbidity[1].

Concerning the age of patients, this has ranged from 20-105 years (Table II).Age has been identified as a marker of risk for stroke [1,4]. Both developed and developing countries are watching a rise in the population of old people. As young adults approach middle age, stroke prevalence increases[5].The incidence of stroke rapidly increases with age, doubling for each decade after age 55[6-7]. The current study has shown that the main bulk of patients is that between 40-89 years of age, as there were 905 (95.3%); only 45 (4.7%) patients represent age groups younger than 39 years and older than 90 years; this goes with other studies in the literature [4,6,8].

Sex differences have profound implications for effective prevention and treatment. Epidemiologic studies reveal a clear age-by-sex interaction in stroke prevalence, incidence, and mortality. Premenopausal women are most likely protected against stroke because of sex steroid hormone-dependent mechanisms. Estrogen promotes blood flow by decreasing vascular reactivity while testosterone has opposite effects. Both are involved in the development of atherosclerosis. While premenopausal women experience fewer strokes than men of comparable age, stroke rates increase among postmenopausal women compared with age-matched men. This phenomenon, in combination with living longer, are reasons for women being older at stroke onset and suffering more severe strokes[9].

This study shows a predominance of females over males: 510 (53.7%) female patients versus 440 (46.3%) male patients. This goes with other reporters[9] who mention that women appear to have a higher overall lifetime risk of stroke in addition to higher rates of post stroke mortality, disability, depression, and dementia, compared with men. However, others mention no sex difference regarding both the incidence and prevalence. A study from Basrah Governorate, Iraq, shows male predominance; the reason for this gender difference can, probably, be due to local demographic and epidemiological factors[8]. Stroke affects women and men differently; elderly women are affected more severely than elderly men but were more likely to survive[10]. Researchers conclude that stroke has a greater effect on women than men.

Type of Stroke and Other Rfs

Regarding the type of stroke among the patients' population; IS is more predominant than HS variety of brain strokes, 803 (84.5%) versus 147 (15.5%) patients respectively. This is almost similar to the study from Basrah showing 83.6% versus 16%[6] and in Saudia Arabia disclosed 79% versus 18.8% respectively[1,11].

The many RFs that have been found in the present review, whether as one RF or in

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combination are in agreement with other studies in stroke literature.

Regarding obesity risk, the current review shows that obesity (overweight, and obesity type I&II) affects 734 (77.3%) patients of the study group. The obesity epidemic is rising rapidly worldwide. Researchers have found that although body mass index has been associated with ischemic stroke in older populations, however, obesity is a risk factor for young onset ischemic stroke; their studies suggest that the latter association may be partially mediated through hypertension, diabetes mellitus, or other variables associated with these conditions[12]. Furthermore, another study suggests that central obesity and diabetes act synergistically to increase the risk of stroke[13]. Epidemiological studies done in the USA, Europe, and Asia found that higher BMI was significantly associated with increased incidence of coronary artery disease and IS, but the association with hemorrhagic stroke incidence was not always consistent [14]. It is quite interesting to mention that although the previous studies support the concept that obesity as a contributing RF in stroke and other disorders, however, others mention that obesity in those patients hospitalized for stroke, is associated with reduced in-hospital mortality risk and early readmittance[15]. This finding should take adequate consideration in future studies.

Other RFs in this study are represented and have their substantial contribution to both IS and HS, in accordance with many other researchers[16-18]. Some have found that HTN is the most important modifiable RF of stroke (17). A study reported that the RFs significant for stroke in the Saudi population are HTN (38%), DM (37%), HD such as AF, ischemic heart disease, valvular disease, cardiomyopathy (27%), smoking (19%) and family history of stroke (14%)[19]. From among the various treatable RFs, HTN was found to be the most important RF for stroke among the Saudi population[20]. Researchers reported that HTN (52%) was the most important RF to induce stroke, followed by DM and cardiac disorders in the Saudi population. Further, the frequent causes of cerebral infarcts found were atherosclerosis 36% followed by HTN and/or diabetic arteriolopathy 24% and cardiac embolisms 19%. Hypertensive arteriolopathy accounted for two-thirds of the cerebral hemorrhages, whereas strokes related to small artery disease, i.e. lacunar infarcts and ICHs, accounted for 47% of the cases[21].

However, other researchers have found in their studies that the major predisposing factors identified were HTN followed by DM, cardiac disease and cigarette smoking. Apparently, the combination of hypertension and DM carried a higher risk especially in women[18, 22-23]. Moreover, adequate blood pressure reduction, cessation of cigarette smoking and the use of antithrombotic therapy in atrial fibrillation are the most effective modifiable RFs in stroke prevention[24]. Among the women, RFs in this study are similar to those found in other studies[25-26]. However, researchers mention that unlike Causians, large-vessel thrombosis, cerebral venous thrombosis, and cardioembolism are common among young Asian women with stroke[27]. A high proportion of strokes are pregnancy-related[27-28].

While a greater proportion of strokes are due to subarachnoid haemorrhage and intracranial haemorrhage in young adults (40–55%) compared to the general stroke population (15–20%)[2,29-31], cerebral infarction is still most common. An increased risk of cerebral infarction among young adults with conventional vascular risk factors is observed, particularly in developing countries due to increasing smoking rates and urbanization[32]. Alcohol, the least frequent RF, has been found in 8 (0.8%) patients; this is because this liquor is not consumed on a large scale in our community for both cultural and ritual reasons.

Researchers mention that stroke may stand third, fourth, or fifth cause of mortality and first cause of disability[6, 33-35]. The latter, disabilities, do not only include physical varieties, but, however, include cognitive aspect of the problem as researchers have shown a decline in the global cognitive function of the victims of stroke[36]. The mortality rate, in the present review, has been found, among IS to be 10.7% (86/803), and 32% (47/147) among HS patients.

Clinicians in recent literature mention many prognostic factors that may significantly affect the outcome of the acute stroke; such factors may include C-reactive protein, troponin, calcium, and homocysteine[37-41].

The present study has shown that females outnumber males and that IS incidence is more than five times that of HS. Most of patients were middle-aged, (684/950, 70% had their ages between 50-79 years. Identifiable RFs, in a decreasing order were as follow: obesity 734 (77.3%), HTN 568 (59.8%), HL 235 (24.7%), smoking 191 (20.1%), PS190 (20%), HD153 (16.1.3%), DM 77 (8.1 %). However, 21 (2.2%) patients had no gross identifiable RFs, The current study had shown that during the admission period, the MR among HS sufferers were more than that among IS patients {47/147, 32% versus 86/803, 10.7% respectively}.

In order to comprehensively deal with such on-going clinical event, appropriate management strategies and facilities for the care of stroke sufferers should be available at local medical institutions. The local health authorities should take this into consideration in their future planning. It is recommended that various local RFs, and those factors that predict and incur a prognostic outcome, may be taken into consideration in local future large-scale-stroke studies.

DECLARATION OF INTEREST

Conflicts of Interest: Nothing declared.

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ثوختة

خاندنةك ل دور جورِيَن نةخوشيا شةبلةبينا مةذى بو نةخوشيَن نظاندى ل نةخوشخانا ئازادى يا فيَركرنىَ ل ثاريَزطةها دهوكىَ

ثيَشةكى: نةخوشييا شةبلةبينا مةذى ذ نةخوشييَن زور بةربةلاظن ل جيهانىَ كو دبيتة ئةطةرىَ مرنةكا زور و هةروةسان دبيتة ئةطةرى جةستةيا هزرى و فيزيكى يا طرنك.
نةخوشيا شةبلةبينا مةذى دبيتة ئةطةرىَ لاوازييَةكا زور يا بارىَ ئابورى ل سةر نةخوشان و حكومةتان.
ئارمانج . ذبةر هةبوونا ضةند جورِيَن ليَك طوهور ين فاكتةرِيَن مةترسييَ ئةف خاندنة هاتة دروستكرن ل سةر فاكتةرِيَن مةترسى ين ئةطةرىَ ضيَكرنا شةبلةبينا مةذى ل ثاذيَرى مة.
نةخوشى و ريَك. ئةف خاندنة هاتة كرن ذ كومبونا ضةند جورِيَن نةخوشا كو دبنة 950 ئةويَت هاتينة نظاندن ل ردها زانستيَن كوما دةمارا ل نةخوشخانا ئازادى يا فيركرنىَ ل ثاريَزطةها دهوكىَ هةر ذ ميَذوويا كانينا ئيَكىَ ل سالا 2014 م . فورمةك هاتة دانان بو كومكرنا ثيَزانينا و داتاييَن ب نةخوشي ظة ظةطرتى . هندةك نةخوش هاتنة دويركرن ذ بروطرامىَ ذبةر شك هةبوونا كيسةك خوينى يان طريَكةك يان توشى هيَزةكا دى بيت.

دةرئةنجام: هةر ذ 950 نةخوشا 510 نةخوشيَن ذن بوون (53.7 %) تةمةنىَ وان ذ 23-1.5 سال بوون ب ريَذةيا ذى 63.9 ± كيَرفا ريَذةكى 13.1 سال . و نةخوشيَن دى ذ زةلاما بوون ب ريَذةيا 46.3% تةمةنىَ وان نافبةينا 25-98 سالان بوو و ب ريَذةيا ذى 65.4 ± كيَرفا ذى 13.1 سال. ثتريا جورِيَن نةخوشا 684 (70%) تةمةنيَن وان ل نافبةينا 5-79 سالان بوو و هةروةسا 806 (84.5 %) شةبلةبينا مةذى يا كيَم خوين بوون و ريَذةيا شةبلةبينا مةذى يا خوين ريَذى 147 نةخوش بوون ب ريَذةيا (15.5 %).
فاكتةرِيَن مةترسييَ ل دةف نةخوشا ئةظة بوون: ةةلةةوى 734 (77.3 %) , بلندبوونا فشار خوينىَ 568 نةخوش بوون (59.8 %)، خارنا روينى 235 (24.7 %)، جطارة كيَشان 191 نةخوش بوون (20.1 %)، شةبلةبينا مةذى يا كةظن 190 (20 %)، نةخوشييَن دلى 153 (16.1%)، نةخوشيا شةكرىَ 77 (8.1 %)، و 21 نةخوش ب ريَذةيا (2.2%) ض فاكتةرِييَن نةخوشييَ لىَ ديار نةبوون و هندةك جورين دى تنىَ ئيَك فاكتةر يىَ مةترسى ل دةف بوو يان ثتر. دظىَ خاندنىَ دا دةرئةنجامىَ هاتينة نظاندن ل نةخوشخانىَ 133 مرن (14%) ذ نةخوشابوون، ريَذةيا مرنىَ ب شةبلةبينا مةذى يا كيَم خوينىَ 86 بوون ذ كوذمىَ 8.3 نةخوشان (17.7 %)، هةر وةسا مرن ب شةبلةبينا خوين ريَذييَ 47 نةخوش بوون ذ كوذمىَ 147 (32%)، هةر وةسان 817 نةخوشا (86%) نةخوشخانة ب جة هيَلان يان ب ثةركةفتى دةركةتن.

دةرئةنجام: لةبلةبينا مةذى دبيتة نةخوشييةكا بةرضاظ ذ كوذمىَ نةخوشيَن نظاندى يان راوانةكرى بو نةخوشخانا ل جيهانىَ و ثيَك دهيَت ذ هةردوو رةطةزان هةر وةسان بو جوداهييا مرنىَ يان نةخوشييا .ذ فاكتةرِيَن مةترسييَ كو دشيَن ضارةستر بكةين ةةلةوى و بلندبوونا فشارا خوينى و نةخوشيا شةكرىَ و ئيَشيَت دلى و جطارة كيَشان و لةبلةبينا كةظن و خارنا روينىَ . بةلىَ مةديتن ل ظىَ خاندنىَ 21 (2.2 %) ض ذ فاكتةرِيَن مةترسيى ل سةر ديار نةبوون .. ئةظ خاندنا مةكرى بو ئيَشا لةبلةبينا مةذى ض جاوازى نةبوو ذ خانديين دى ين هاتينة كرن ل جيهانىَ . هندةك ثيَزانين نةهاتنة طوتن ل ظىَ خاندنىَ ئةوذيك ثشكا جيناتا ئةوا هاتية ديباركرن ل هندةك خاندنيَن دى . ئةف خاندنا هتية كرن ل مة تيشك دانا سةر هندةك فاكتةرِيَن مةترسييَ ئةويَن بهيَنة ضارةستركرن يان نة هيَن ضارةستركرن ل نةخوشخانا فيَركرنىَ ل ثاريَزطةها دهوكىَ , ئةوا ثيَك هاتى ذ ضةندين ئولِيَن جودا جودا , ئةفجا ئةم ثيَتظى هندةك شلوظةكرنيَن ثزيشكى و ئامارِيَن موكم هةنة ل ظى جظاكى ذ لايىَ كرنا تاقيطةهيَن جينى يَن لةبلةبينا مةذى هةروةسان ثيَتظى ثروتوكولةكىَ ثاراستى و كارطيَرى ية كو ب كيَر بهيَت بو نةخوشيَن لةبلةبينا مةذى هةر وةسان ضيَكرنا دةزطةهيَن ساخلةمى يَن هاريكار بو نةخوشيَن لةبلةبينا مةذى كو خزمةتا ثيَشكيَشى وان بكةن.

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الخلاصة

لمحة عن حالات مرضى السكتات الدماغية الداخلين الى مستشفى ئازادي العام التعليمي في دهوك

الخلفية والأهداف: تبقى السكتة الدماغية مرضاً بارزاً حول العالم و التي تتسبب بوفيات عالية و عوق ذهني و فيزياوي ذو أهمية. السكتة الدماغية تتسبب بعبء إقتصادي كبير على الموازنة المالية للأشخاص و الحكومات. و بسبب وجود طيف متنوع من عوامل الخطورة تم تصميم هذه الدراسة عن عوامل الخطورة المسببة للسكتة الدماغية في منطقتنا.

طرق البحث: هذا التصميم لدراسة مقطعية و جمع نماذج متتالٍ لشمول 950 مريضاً من الذين أُدخِلوا الى ردهة العلوم العصبية في مستشفى ئازادي التعليمي في مدينة دهوك خلال الفترة من كانون ثانٍ الى كانون أوَّل عام 2014ميلادي. تم تصميم استمارة بيانات لجمع المعلومات و البيانات ذات العلاقة عن المرضى. تم إستبعاد المرضى المشكوك في كون وجود شَوَه خَلْق وعائي دموي أو ورم أو شدَّة خارجية.

النتائج: من بين 950 مريضاً كان هناك 510 مريضة أنثى (53.7%) تتراوح أعمارهن بين 23-105 سنة بمعدّل عمري 63.9 ± انحراف قياسي 13.1 سنة. بقية المرضى 440 من الذكور 46.3%، تتراوح أعمارهم بين 25-98 سنة و بمعدَّل عمري 65.4± انحراف قياسي 13.1 سنة. معظم الحالات المرضية 684 (70%) كانت أعمارهم بين 50-79 سنة كان هناك 806 (84.5%) سكتة دماغية إقفارية إحتشاء الدماغ (شحيحة التغذية الدموية)، بينما السكتات الدماغية النزفية كانت 147 (15.5%). عوامل الخطورة في المرضى كانت كالتالي: السمنة 734 (77.3%)، ارتفاع الضغط الدموي 568 (59.8%)، إفراط الدهون 235 (24.7%)، التدخين 191 (20.1%)، سكتة دماغية سابقة 190 (20%)، مرض القلب 153 (16.1%)، داء السكَّري 77 (8.1%)، و بعض الحالات الأقلُّ تكرُّر الحدوث. و لو ان 21 (2.2%) لم يوجد عامل خطورة واضح الاّ انه في بعض الحالات كان هناك عامل خطورة واحد أو أكثر. و بقدر التعلُّق بحصيلة النتائج أثناء الدخول الى المستشفى فقد توفي 133 (14%) مريضاً؛ نسبة الوفيات بين مرضى السكتة الدماغية إقفارية إحتشاء الدماغ 86 من مجموع 803 (17.7%) بينما بين مرضى السكتات الدماغية النزفية 47 مريضاً من مجموع 147 (32%)؛ بينما ترك 817 (86%) مريضاً المستشفى امّا بإعاقةٍ جسدية أو بدونها.

الاستنتاجات: تشكِّلُ السكتة الدماغية كينونةً سريرية متميزة من حالات أعداد المرضى الداخلين و المحالين الى المستشفيات في العالم و تشميل عدة مجاميع عمرية من كلا الجنسين و كذلك للوفيات و المَرَضيات. من عوامل الخطورة المعروفة و التي يمكن معالجتها السمنة و إرتفاع الضغط الدموي و داء السكَّري و أمراض القلب و السكتات الدموية السابقة و التدخين و إفراط الدهون و غيرها الأقلُّ نسبة الحدوث؛ و لكن توجد (في هذه الدراسة) 21 (2.2%) حالة لم يمكن معرفة عوامل الخطورة. المشاهدات في هذه الدراسة تُظهِر تشابه مع الدراسات الأخرى في العالم. عدَّة جوانب من هذه الحالة المرضية السريرية لم تتطرَّق إليها الدراسة الحالية كالجانب الجيني و الذي نوقش في كثيرٍ من الدراسات الأخرى. و لو لن الدراسة الحالية قد سلَّطت الضوء على بعض عوامل الخطورة الشائعة، من التي يمكن ، و التي لا يمكن، تحويرها و معالجتا، في مستشفى تعليمي تُحال اليه مثل هذه الحالات في مدينة دهوك، و الذي يحوي عدَّة مجموعات إثنية، فان الدراسة توصي بإجراء بحوث مستقبلية طبية و إحصائية رصينة التصميم في هذا المجتمع حول الجانب الجيني للسكتة الدماغية و إنشاء إجراءات وقائية و بروتوكولات إدارية مناسبة و ملائمة تهدف الى تحسين الحصيلة السريرية و أيضاً توجّه المؤسَّسات الصحّية التي خطِّط لإنشاء المؤسّسات الطبية (كالمستشفيات و المراكز الطبّية) الساندة و التي تقدِّم خدماتها لمرضى السكتات الدماغية.