DEPRESSION AND CEREBRAL STROKES - OWN EXPERIENCE *

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Some cerebral strokes cause an impairment of motor, intellectual and cognitive functions. This was the cause [A] that cerebral vascular diseases became a social problem. In recent years [A] great interest has been aroused by emotional reactions occurring in the course of cerebral strokes [A]. Depressive reactions described in literature as post-stroke depression became the subject of many reports. Already in 1921, Kraepelin reported frequent occurrence of depressive states in the course of cerebral ischaemic strokes. The reports by Blenler in 1951 also demonstrated that after cerebral infarcts the condition of melancholia can appear. A number of studies confirmed that emotional reactions and behaviour disturbances are the manifestation of focal damage of the central nervous system. Robinson and Starkstein demonstrated that depression developed more frequently and was more intense in patients with ischaemic focus in the anterior part of the left frontal lobe cortex or in the basal nuclei. The same authors proved higher incidence of depression in the cases of infarcts in the middle cerebral artery region than in the case of their location in regions supplied by the vertebrobasilar arteries. Sinyor et al. confirmed the fact of higher intensity of depression in patients with infarct focus in the frontal region. The occurrence of depression in the cases of cerebral strokes with aphasia remains still a significant problem. Benson in his paper on psychiatric aspects of aphasia suggested that aphasic speech disturbances may cause secondary and understandable depressive reactions. Starkstein and Robinson, on the basis of the American Psychiatric Association classification (DSM-III), distinguished two types of post-stroke depression: major depression and minor depression. Major depression is similar to endogenous depression. The occurrence of major depression remains in strong relation with ischaemic focus location in the left cerebral hemisphere, in the frontal lobe or basal nuclei. On the other hand, minor depression may correspond to the criteria of dysthmic disorders. The occurrence of minor depression is connected with focal lesion location in the parieto-occipital region on the left as well as the right sides.

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Case report

Male patient B.G., aged 57 years previously never received any psychiatric treatment. The patient was born after normal pregnancy and labour. His childhood was very good. He was the only child in the family. His parents were very quiet, considerate, affectionate, caring, hard working. At home a warm and loving atmosphere was always present. In primary school and secondary school the patient achieved very good results. He was very friendly, not quarrelsome, maintaining close and cordial social contacts with his peers. Then, after obtaining his secondary school certificate, he studied with very good results and graduated from the Faculty of Economics. Since the graduation until now he has been working as chief accountant in a big trading company. In his work he has been liked by co-workers, friendly, hard working, dutiful. He failed to settle a family. He suffers from chronic impotence and does not want to make his future wife unhappy. He still lives with his parents who, in spite of elderly age, are in good mental and physical shape. The patient never wanted to diagnose or treat his impotence. In spite of the fact that he failed to settle a family, he regards himself as a happy man. He has a girlfriend with whom he is in strong platonic love.

No mental diseases occurred in the patient's family. The patient denied any head trauma or loss of consciousness. Of serious somatic diseases, the patient has had since years fixed atrial fibrillation which he refuses to diagnose or treat.

The patient was hospitalized due to cerebral ischaemic stroke. The ischaemic focus was located in the anterior part of the left frontal lobe cortex. After discharge from hospital he came to the author of this paper. Detailed psychiatric examination revealed major depression of high intensity. The diagnosis was confirmed by the following tests:

- Hamilton Depression Scale
- Montgomery-Asberg Scale
- Beck Depression Self-Assessment Inventory
- DSM-III Scale
- CGI Scale

Laboratory tests:
- laboratory blood and urine analyses gave normal results
- ECG record demonstrated fixed atrial fibrillation with ventricular rate about 80 bpm,
- EEG record was normal,
- chest radiogram was normal,
- neurological examination: slight motor aphasia, trace right-sided hemiparesis, trace bilateral extensor plantar response,
- eye fundus examination: normal,
- cerebrospinal fluid analysis gave normal result,
- physical examination: completely arrhythmic heart function with about 82 bpm rate;
  besides that the physical examination gave normal results,
- result of magnetic resonance imaging of the head: by MRI examination numerous small ischaemic foci were visualized in the anterior part of the left frontal lobe cortex. The ventricular system and other fluid spaces were unchanged.

The author treated the patient with individual psychotherapy and oral sertraline from low doses up to 100 mg daily. Complete remission of the major depression was obtained.

Discussion

The author decided to treat the patient with sertraline in view of the very high safety of the drug [31]. Extrapyramidal symptoms after the drug are rare [24]. Extremely rare, isolated cases of catatonic syndromes after the drug were described worldwide [25]. Apart from depression treatment, the author intended to improve
the quality of life of the described patient after his cerebral stroke. It is known [38] that sertraline improves the quality of life of patients with respect to their energy, vitality, cognitive functions, social interactions, vivid reactions, behaviour in the place of work, coping at home, satisfaction with life and taking of sick-leaves.

In the described patient, sertraline evidently improved his quality of life with respect to most of the above mentioned aspects.

The author administered sertraline to the described patient in view of its safety in cardiac diseases. The patient has fixed atrial fibrillation. Other authors [37] used the drug in patients after acute myocardial infarction [3].

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Aguglia E., Casacchia M., Cassano G.B.
Institution:
University of Trieste, Italy
Title:
Double-blind study of the efficacy and safety of sertraline versus fluoxetine in major depression.
Porównanie skuteczności i bezpieczeństwa stosowania sertryny i fluoksetyny w leczeniu dużej depresji, badanie z wykorzystaniem podwójnie ślepej prób.
Source
International Clinical Psychopharmacology. 8(3): 197-202, 1993 Fall

[2] Authors:
Bennie E.H., Mullin J.M., Martindale J.J.
Institution:
Leverndale Hospital, Glasgow, UK
Title:
A double-blind multicenter trial comparing sertraline and fluoxetine in outpatients with major depression.
Porównanie fluoksetyny i sertryny w grupie chorych z dużą depresją leczonych ambulatoryjnie, badanie wielośrodkowe z wykorzystaniem metody podwójnie ślepej.
Source

[3] Authors:
Beshay H., Pumarega A.J.
Institution:
James H. Quillen College of Medicine, East Tennessee State University, Quillen/ Mountain Home Veterans Administration Medical Center, Johnson City 37684, USA
Title:
Sertraline treatment of mood disorder associated with prednisone: a case report. Leczenie zaburzeń nastroju występujących podczas podawania prednisonu przy pomocy sertryny.
Source:

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Biri H., Isen K., Sinik Z.
Institution:
Department of Urology, Medical School of Gazi University, Ankara, Turkey

Title:

Source:
International Urology and Nephrology, 30 (5): 611-5, 1998

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Brady K.I., Sonne S.C., Roberts J.M.
Institution:
Department of Psychiatry and Behavioral Sciences, Medical University of South Carolina, Charleston 29426, USA

Title:
Sertraline treatment of comorbid post-traumatic stress disorder and alcohol dependence.

Source:

[6] Authors:
Chouinard G.
Institution:
Department of Psychiatry, University of Montreal, Hospital Louis H. Lafontaine, Quebec, Canada

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Sertraline in the treatment of obsessive-compulsive disorder: two double-blind, placebo-controlled studies. [Review] [40 refs]

Source:

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Croft H., Settle E.Jr., Houser T.
Institution:
Charleston Area Medical Center, West Virginia, USA

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A placebo-controlled comparison of the antidepressant efficacy and effects on sexual functioning of sustained-release bupropion and sertraline.

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Davis S.M., Harrison W.M., Keller M.B.
Institution:
Rhode Island Hospital and Brown University, Providence 02903, USA

Title:
The treatment of chronic depression, part 3: psychosocial functioning before and after treatment with sertraline or imipramine.

Source:

[9] Authors:
Ekselius L., von Knorring L.
Institution:
Department of Neuroscience, Psychiatry, University Hospital, Uppsala, Sweden

Title:
Personality disorder comorbidity with

Source:
major depression and response to treatment with sertraline or citalopram.
Zaburzenia osobowości współwystępujące z dużą depresją a skuteczność leczenia sertraliną lub citalopramem.
Source: 

[10] Authors: Finkel S.L., Richter E.M., Clary C.M.
Institution: Northwestern University Medical School, Department of Psychiatry and Behavioral Sciences, Chicago, IL 60611-3317, USA
Title: Comparative efficiency and safety of sertraline versus nortriptyline in major depression in patients 70 and older.
Porównanie skuteczności i bezpieczeństwa sertraliny i nortriptyliny w grupie chorych w wieku 70 i więcej lat.

Institution: Dean Foundation for Health, Research, and Education, Madison, Wis., USA
Title: Double-blind parallel comparison of three dosages of sertraline and placebo in outpatients with obsessive-compulsive disorder.
Porównanie trzech dawek sertraliny i placebo w leczeniu ambulatoryjnym chorych z zespołem obsesyjno-kompulsyjnym; badania z użyciem podwójnie ślepej próby.
Source: Archives of General Psychiatry. 52 (4): 289-96, 1995 Apr.-

Institution: Dean Foundation for Health, Research and Education, Madison, WJ 53/17, USA
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Trwające rok badanie skuteczności sertraliny stosowanej w stałej dawce, w leczeniu zespołu obsesyjno-kompulsyjnego, z wykorzystaniem podwójnie ślepej prób i kontroli placebo.

[13] Authors: Grignaschi G., Samanin R.
Institution: Instituto di Ricerche Farmacologiche Mario Negri, Milan, Italy
Title: Role of serotonin receptors in the effects of sertraline on feeding behaviour.
Wpływ sertraliny na zachowanie związane z przyjmowaniem pokarmów - rola receptorów serotoninowych.
Source: Psychopharmacology. 110 (1-2): 203-8, 1993

Institution: Department of Psychiatry and Behavioral Sciences, University of Texas Medical Branch at Galveston 77555-0429, USA
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Department of Pharmacy, Scott and White Memorial Hospital, Temple, Tex., USA

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Luteal phase sertraline treatment for premenstrual dysphoric disorder. Results of a double-blind, placebo-controlled, cross-over study.

Source:

[16] Authors:
Kant R., Smith-Seemiller L., Zeiler D.
Institution:
Head Injury Clinic, St. Francis Medical Center, Pittsburgh, PA 15224, USA

Title:
Treatment of agression and irritability after head injury. Leczenie agresji i drażliwości u osób, które doznaly urazu głowy.

Source:

[17] Authors:
Katzelnick D.J., Kobak K.A., Greist J.H.
Institution:
Foundation for Health, Research and Education, Madison, WI 5317, USA

Title:
Sertraline for social phobia: a double-blind, placebo-controlled cross-over study. Leczenie fobii społecznej przy użyciu sertraliny, krzyżowe badanie z użyciem podwójnie ślepej próby i kontroli placebo.

Source:

[18] Authors:
Kavoussi R.J., Coccaro E.F.

Institution:
Department of Psychiatry, Medical College of Pennsylvania, Eastern Pennsylvania Psychiatric Institute, Philadelphia 19129

Title:
An open trial of sertraline in personality disorder in patients with impulsive aggression. Otwarte badania sertraliny u pacjentów z zaburzeniami osobowości z towarzyszącą impulsywną agresją.

Source:

[19] Authors:
Keller M.B., Gelenberg A.J., Hirschfeld R.M.

Institution:
Department of Psychiatry and Human Behavior, Butler Hospital, Brown University, Providence, RI 02912, USA

Title:
The treatment of chronic depression, part 2: a double-blind, randomized trial of sertraline and imipramine. Leczenie przewlekłej depresji część 2: porównanie skuteczności sertraliny i imipraminy z wykorzystaniem podwójnie ślepej próbby i losowym podziałem na grupy.

Source:

[20] Authors:
Keller M.B., Harrisson W., Fawcett J.A.

Institution:
Butler Hospital, Brown. University, Providence, RI 02912, USA

Title:
Treatment of chronic depression with sertraline or imipramine: preliminary blinded response rates and high rates of undertreatment in the community. Leczenie przewlekłej depresji sertraliną lub imipraminą: wstępne dane dotyczące odsetka reakcji oraz duża częstość nieodpowiedniego leczenia w warunkach
Wielośródkowe badanie skuteczności leczenia zespołu naczyń przy użyciu sertraliny z wykrzystaniem kontroli placebo.


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Title: Extrapyramidal adverse effects associated with sertraline.

Pozapiramidowe objawy niepożądane związane ze stosowaniem sertraliny.


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Lauterbach E.C.

Institution: Department of Psychiatry and Behavioral Sciences, Mercer University School of Medicine, Macon, Georgia, USA

Title: Catatonia - like events after valproic acid with risperidone and sertraline.

Wystąpienie objawów o typie katatonii po łącznym podaniu kwasu walproinowego, risperidonu i sertraliny.


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Levin I.D., Briggs S.J., Christopher N.C.

Institution: Department of Psychiatry, Duke University, Durham, NC 27710

Title: Sertraline attenuates hyperphagia in rats following nicotine withdrawal.

Sertralina hamuje nadmierny apetyt u szczurów, którym odstawiono nikotynę.
Source:

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Londborg P.D., Wokow R., Smith W.T.
Institution:
Summit Research Network, Seattle, Washington 98104, USA
Title:
Sertraline in the treatment of panic disorder. A multi-site, double-blind, placebo-controlled, fixed-dose investigation.
Leczenie zespołu lęku napadowego przy użyciu sertraliny. Badanie wielośrodkowe z wykorzystaniem podwójnie ślepej próbki, kontroli placebo i stałej dawki leku.
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Major depression and its response to sertraline in primary care vs. Psychiatric office practice patients, results of an open-label trial in Argentina.
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Institution:
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Double-blind, multicenter comparative study of sertraline and amitriptyline in hospitalized patients with major depression.
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[35] Authors:
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Placebo - controlled study of sertraline in depressed recently abstinent alcoholics. Ocena skuteczności sertryline w grupie osób od niedawna zachowujących abstynencję od alkoholu; badanie z wykorzystaniem grupy kontrolnej placebo.

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Biological Psychiatry. 44 (7): 633-6, 1998 Oct 1

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