# INFORMATION FLOW OVER THE PROBLEM "ULTRASTRUCTURE OF THE TESTICLE" IN THE MEDICO-BIOLOGICAL REFERENCED JO URNALS

#### D. Tomov

The ultrastructural features of the testicles (T) of animals and man create out certain interest for the practice. The published papers concerning more or less this problem can be found in various medical and medico-biological journals, which all undoubtfully reveal out definite problems for the consumers of that information. Any way, by means of the medico-biological referenced journals it is possible to get such kind of information for certain articles arised the scientific value of the cited question.

The object of our present work was to study the distribution of the information flow over the problem "Ultrastructure of T" according to the references of the scientific publications and to narrow the number of the useful journals concerning this problem only.

# Materials and methods

The referenced papers concerning the question of the T-ultrastructure were studied in the following journals and sections of them: Referetivnii Jurnal Biologii (USSR) — Ultrastructura semennika, rubrica Semenniki, subrubrica Ultrastructura, section Polovaya systema; Index Medicus, rubric Testis, subrubric Ultrastructure; Excerpta Medica, Section I—Anatomy, Anthropology, Embryology and Histology, chapter Male reproductive system, subchapter Testis, spermiogenesis and genital tract, also under the basic rubric Ultrastructure of the testis. The titles of the initial sources of information and the years of publication in them, together with the double references of same articles in various referenced journals were thoroughly analysed. The study covers the period of 1977—1979.

## Results and discussion

During the cited period a total number of 192 articles and other scienti fic papers and publications (234 references) were referenced in the aforemen tioned journals; 220 references were from journals, 9 — from 7 congress proceed ings, 3 — from a book, 1 — from a dissertation and 1 — from a manuscript left in VINITI. The distribution of the references in the various referenced journals according to years is presented on table 1. It is obvious that there is a certain decrease of the number of publications over the problem in the studied period, totally and individually for any of the three referenced journals.

The referenced articles are published in 73 journals altogether. 10 of them are with a common medical character; 27 - profile journals in anatomy, andrology\_da\_\_ pub\_ oduction; 37 - with other medico-biological profile.

13 references are in the first group, 165 — in the second one, 42 — in the third. The relation of the number of references in the individual referenced journals is the following: Index Medicus: RJBiology (USSR): Excerpta medica=92:86:56 (39%:37%:24%). The coefficient of mean density (relation of the number of publications in journals of the second group to total number of journals contenting them) is respectively: Index medicus — 2.7, RJBiology — 4.9, Excerpta medica — 3.6.

The references of the articles of the second group are 75% of the total number of all references.

A group of 9 journals with most numerous and valuable (according to the referenced journals) publications over the problem of T-ultrastructure was outlined. They were discussed by Science Citation Index too.

Table 2 shows these basic journals ordered due to the year of publication of the articles and the year of reference of the latter. Latest the references of Excerpta medica are publicated. The articles of the basic journals were 52.1% of the total number of all referenced papers, while the references of these articles were 58.1% of all references.

Table 3 shows the referenced articles according to the year of publishing in the basic journals. It can be seen that most quickly and greatest number of articles in these leading journals is referenced by RJBiology, followed by Index medicus and Excerpta medica. However, if 55 references of 38 articles published in 1977 have found a place in the referenced journals in the whole period under our study, only 11 references of 8 articles published in 1979 were included in the referenced journals in the same year only.

Table 4 shows the various terms of reference of the articles in the differenced journals according to the origin of them — from basic journals or from some other sources. As a whole, in the first year of publication of the papers only 32.9% of them are referenced; 1 year later — 62%; 2 years later — 5.1%. It is worth-mentioning that the articles from the basic journals are referenced 1.4 times more often, 1 year later — 1.6 times more often, while 2 years later — 11 times rarer than the rest articles published in other journals. The doubling of the references from the different referenced journals-at-

The doubling of the references from the different referenced journals attributes to the higher scientific importance of certain publications. 25 articles have been referenced by 2 of the referenced journals and another 8 articles— even from the 3 referenced journals. 7 of the latter were found in the basic journals, while the 8-th of them was included in J. Ultrastructure Research, which is classified on 10-th place among referenced journals with 4 references. The published 69 articles only in 4 basic journals were discussed in 99 references. All that confirms the opinion that there is a certain interest of including for a reference any article from a basic journal. To a definite level of value of the scientific information for the research workers they pay certain attention to some indexes of cited literature, such as Science Citation Index.

We could mention some more common-medical journals: Nature, Experientia, etc. or some profile journals: American J. of Veterinary Research, Dermatologica, Human Genetics, etc. where an important information can also be found, specially concerning the objective of our study. Loss of information coming out of investigating only the basic journals is up to 41.9%.

Greatest number of primary sources of information is worked out by Index Medicus — 50, followed by RJBiology — 33 and Excerpta medica — 24 (Table 5). 45 periodicals (62%) are issued in English, 9 — in German, 4 — in Italian, 3 — in French, 3 — in Russian, etc. Based on these languages a total number of 64 journals (88% of all issues) are distributed in the scientific world.

The significance of the single referenced journal can be shown by analysing both, quantity and quality of the included scientific information.

Index Medicus references a considerable number of primary sources of information publishing their titles averagely 5-8 months after their first publication in any leading journal. It is a pity that due to the difficult and late supply of the summaries and bigger part of the titles from the periodicals and other scientific issues in the Western countries, received in our libraries, there exist certain difficulties for the consumers of such kind literature.

Excerpta medica presents in a very suitable way wide range of information concerning actual problems and in many cases when there is not any source of information from any congress or journal the summaries from this referenced journal could be satisfactory for the investigator. Excerpta medica is very valuable for a retrospective analysis of the cited problem.

RJBiology has definite advantages for the Bulgarian reader due to the near language, relatively quick reference of valuable publications and congress materials from socialistic countries, where the contacts between the scientific institutes and workers are more often.

In conclusion we must point out that the knowledge of the basic primary sources of information and their regular analysing by the specialists in andrology will give them a constant and actual information about the problems of T-ultrastructure in normal and pathological conditions.

### ИНФОРМАЦИОННЫЙ ПОТОК ПО ПРОБЛЕМЕ «УЛЬТРАСТРУКТУРА Мошонки» в медико-биологических реферативных журналах

Д. Томов

#### РЕЗЮМЕ

Проведено исследование реферирования публикаций по определенной проблеме ультраструктура мошонки. Прослежено реферирование в трех медико-биологических реферативных журналах: Index Medicus, Excerpta Medica и Реферативный журнал Биология. Устанавливается, что за период с 1977 по 1979 г. г. в указанных журналах реферировано всего 192 статьи с 234 рефератами. Из журнала Index Medicus реферированы 92 статьи, из Реферативного журнала Биология — 86 статей, а из журнала Excerpta Medica — 56 статей. Выделено 9 журналов, содержащих наибольшую по количеству и вероятно наиболее ценную информацию по указанной проблеме. Информация в этих 9 журналах составляет больше половины информации, содержащейся во всех 73 журналах и других первоисточниках. Устанавливается, что быстрее всего и больше всего статей из этих трех ведущих периодических журналов реферируется в РЖ Биология, а больше всево первоисточников по указанной проблеме обрабатывает Index Medicus. Существует дублирование рефератов отдельных статей, что свидетельствует о возможно более высокой научной ценности этих публикаций.