Open access World Wide Web resources on urogenital infections*

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Abstract

Background. Urinary tract infections are the most common infections seen in hospitalized patients and the second most common, after respiratory tract infections, seen in the general population. The World Wide Web can now assist healthcare professionals in finding up-to-date information on different medical conditions.

Methods. We sought to identify websites that contain information on urogenital infections by using popular search engines, such as Google and Yahoo. We also reviewed the sites of major institutions, and international healthcare associations. Only those sites that were written in English, were open access, and developed by a government, academic institution or a national or international healthcare professionals association were included.

Results. We selected 114 sites that provide healthcare professionals with useful information on urogenital infections based on the criteria described above.

Conclusions. There are several free websites that contain worthy information on urogenital infections. The compilation of a list of Internet resources on these common types of infections may be useful to practitioners and medical students.

Keywords: cystitis; epididymitis; orchitis; prostatitis; pyelonephritis; urethritis; urinary tract infection

Introduction

Urinary tract infections (UTIs) are the most common infections seen in hospitalized patients and the second most common infections seen in the general population [1]. It is estimated that in the US, UTIs account for seven million office visits and one million hospitalizations every year [2,3]. Another study showed that the prevalence of nosocomial urinary tract infections in Europe was 10% [4]. Moreover, inflammatory diseases of the prostate and the distal genital tract are emerging as a major health problem. It is estimated that up to 15% of adult men may be affected at some point in their lives [5]. Another issue is when to treat and what is the appropriate treatment of urogenital infections [6,7].

The need for education and constant updating on such a common clinical condition can now be achieved with the use of the World Wide Web (WWW). However, the large volume of resources that are available makes it difficult to discriminate, which are the appropriate resources [8]. Therefore, we tried to identify major websites with information on urogenital infections, as a guide to healthcare professionals.

Methods

Popular Internet search engines, including Google and Yahoo, were used to identify websites that provide information on genito-urinary tract infections. The methods for identifying the relevant websites as well as the reasoning for selecting the appropriate resources for inclusion in our list of websites have been described elsewhere [9]. The terms we used were ‘urinary tract infection’, ‘pyelonephritis’, ‘cystitis’, ‘urethritis’, ‘prostatitis’, ‘epididymitis’, ‘orchitis’, ‘haemodialysis’, ‘peritoneal dialysis’, ‘kidney transplantation’ and a combination of these terms. The first 200 hits on each search engine were further reviewed. PubMed and Current Contents database were also searched using the previously used terms and ‘world wide web’.

We also searched the sites of major institutions, namely Harvard University, Karolinska institute, Centers for Disease Control and Prevention, National Institute of Diabetes & Digestive & Kidney Diseases, American Academy of Family Physicians, European Association of Urology, American Society for Nephrology and American Urological Association. Finally, relevant links to other web resources found in the websites of the above mentioned institutions as well. We explored these links to search for further information.

To be included in our list, a website had to be developed by a government, academic institution, or a national or...
international healthcare professionals association, as a
guarantee of accuracy and overall validity for the informa-
tion provided. Personal sites were excluded. In addition,
we included only those sites that were written in English and
those that offered free access to the user (sites requiring
free registration were included in our list). Finally, we
included some sites that were mainly designed for public use.
The reason for our decision was that these sites
contained information that could be useful to healthcare
professionals.

Results

Our final analysis yielded 114 addresses containing
information on urogenital infections (Supplementary
Table 1, see www.ndt.oxfordjournals.org). Of these, 43
were dealing with urinary tract infections (pyelone-
phritis, cystitis and urethritis), five specifically with
pyelonephritis, 18 with prostatitis, 20 with epididymitis
and orchitis and 14 with urethritis. Some websites dealt
with more specific diseases. Out of these, six sites were
concerned with pyelonephritis in transplanted patients,
three with pyelonephritis in patients undergoing
dialysis, two with pregnancy and UTIs and one site
contained guidelines for prevention of catheter-asso-
ciated urinary tract infections. Finally, two sites
contained images of diseases of the urinary tract.

Discussion

Medical sciences resemble living organisms in the
way of evolution and knowledge expansion. The informa-
tion that is aggregated every day has become so
large over the last years that physicians cannot easily
assimilate without help from current technology. The
WWW offers physicians the opportunity for contin-
uous medical education. Well-written reviews as well
as findings from comparative trials are available
online. Medical societies, universities, other institu-
tions and organizations, as well as medical journals
offer valuable information for everyday practice. Their
websites include the majority of the relevant available
online information.

On the other hand, the data available online is huge
and on several occasions users find even frequently
used Internet portals containing potentially misleading
information. Thus, the selection of the most appro-
priate website that contains the desirable information
is difficult. Our aim was to identify websites that
provide updated information and which can be useful
to practising physicians as well as doctors in training.
It is noteworthy that major foundations like Harvard
University as well as highly respected journals like the
‘Annals of Internal Medicine’ offer a considerable
amount of information free of charge.

In the table of this manuscript, we present a selected
list of relevant WWW resources from the numerous
websites that offer information regarding infections
of the urogenital tract. We recognize that several
other websites that may also offer valuable informa-
tion on this issue might have been omitted. However,
even if someone included all of the available relevant
sites, the produced list probably would have been
impractical.

For all the websites included in our list, at least one
specific Internet address link is provided. In several
of the selected websites, the provided information was
comprehensive. Detailed texts were provided in the
selected websites that targeted specialists of the field.
It should be mentioned that we included some
websites that provided information mainly for the
public. The reason for including these sites to the list
we compiled was that they could also contain useful
information for physicians.

In summary, we put together a list of open access,
English language WWW resources on urogenital
infections (excluding obstetrical and gynaecological
infections that have been out of the scope of the
present work) that may be useful to doctors in training
and practice with access to Internet.

Conflict of interest statement. None declared.

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