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| |  |  | | --- | --- | | **Acute Inflammations Data Set**  *Download*: [Data Folder](http://archive.ics.uci.edu/ml/machine-learning-databases/acute/), [Data Set Description](http://archive.ics.uci.edu/ml/machine-learning-databases/acute/diagnosis.names)  **Abstract**: The data was created by a medical expert as a data set to test the expert system, which will perform the presumptive diagnosis of two diseases of the urinary system. |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Data Set Characteristics:** | Multivariate | **Number of Instances:** | 120 | **Area:** | Life | | **Attribute Characteristics:** | Categorical, Integer | **Number of Attributes:** | 6 | **Date Donated** | 2009-02-11 | | **Associated Tasks:** | Classification | **Missing Values?** | No | **Number of Web Hits:** | 48202 |   **Source:**  Jacek Czerniak, Ph.D., Assistant Professor  Systems Research Institute  Polish Academy of Sciences  Laboratory of Intelligent Systems  ul. Newelska 6, Room 218  01-447 Warszawa, Poland  e-mail: jacek.czerniak **'@'** ibspan.waw.pl or jczerniak **'@'** ukw.edu.pl  **Data Set Information:**  The main idea of this data set is to prepare the algorithm of the expert system, which  will perform the presumptive diagnosis of two diseases of urinary system. It will be  the example of diagnosing of the acute inflammations of urinary bladder and acute  nephritises. For better understanding of the problem let us consider definitions of  both diseases given by medics. Acute inflammation of urinary bladder is characterised  by sudden occurrence of pains in the abdomen region and the urination in form of  constant urine pushing, micturition pains and sometimes lack of urine keeping.  Temperature of the body is rising, however most often not above 38C. The excreted  urine is turbid and sometimes bloody. At proper treatment, symptoms decay usually  within several days. However, there is inclination to returns. At persons with acute  inflammation of urinary bladder, we should expect that the illness will turn into  protracted form.  Acute nephritis of renal pelvis origin occurs considerably more often at women than at  men. It begins with sudden fever, which reaches, and sometimes exceeds 40C. The fever  is accompanied by shivers and one- or both-side lumbar pains, which are sometimes very  strong. Symptoms of acute inflammation of urinary bladder appear very often. Quite not  infrequently there are nausea and vomiting and spread pains of whole abdomen.  The data was created by a medical expert as a data set to test the expert system, which  will perform the presumptive diagnosis of two diseases of urinary system. The basis for  rules detection was Rough Sets Theory. Each instance represents an potential patient.  The data is in an ASCII file. Attributes are separated by TAB.  Each line of the data file starts with a digit which tells the temperature of patient.  -- Attribute lines:  For example, '35,9 no no yes yes yes yes no'  Where:  '35,9' Temperature of patient  'no' Occurrence of nausea  'no' Lumbar pain  'yes' Urine pushing (continuous need for urination)  'yes' Micturition pains  'yes' Burning of urethra, itch, swelling of urethra outlet  'yes' decision: Inflammation of urinary bladder  'no' decision: Nephritis of renal pelvis origin  **Attribute Information:**  a1 Temperature of patient { 35C-42C }  a2 Occurrence of nausea { yes, no }  a3 Lumbar pain { yes, no }  a4 Urine pushing (continuous need for urination) { yes, no }  a5 Micturition pains { yes, no }  a6 Burning of urethra, itch, swelling of urethra outlet { yes, no }  d1 decision: Inflammation of urinary bladder { yes, no }  d2 decision: Nephritis of renal pelvis origin { yes, no }  **Relevant Papers:**  J.Czerniak, H.Zarzycki, Application of rough sets in the presumptive diagnosis of urinary system diseases,  Artifical Inteligence and Security in Computing Systems, ACS'2002 9th International Conference Proceedings,  Kluwer Academic Publishers,2003, pp. 41-51  **Citation Request:**  Please cite:  J.Czerniak, H.Zarzycki, Application of rough sets in the presumptive diagnosis of urinary system diseases,  Artifical Inteligence and Security in Computing Systems, ACS'2002 9th International Conference Proceedings,  Kluwer Academic Publishers,2003, pp. 41-51 |

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