

Mikroskop:20062/annot

[

```
{
  "idx": "20062+",
  "txt_cz": "1. Tubulus seminiferus contortus",
  "txt_en": "Tubulus seminiferus contortus",
  "desc_cz": "Transverz\u00e1ln\u00ed \u0159ez sto\u010den\u00fdm kan\u00e1lkem.",
  "desc_en": "",
  "insert_who": "IvaG",
  "marks": [
    {
      "shape": "arrow",
      "ori": "down",
      "color": "green",
      "size": "small",
      "x_rel": "0.194203",
      "y_rel": "0.264849"
    }
  ]
},
{
  "idx": "20062+",
  "txt_cz": "1.2 Bu\u0148ky seminiferus contortus",
  "txt_en": "Cells of seminiferus contortus",
  "desc_cz": "myoidn\u00ed bu\u0148ky (zelen\u00e1 \u0161ipka)\nPrim\u00edrn\u00ed spermatoct (\u017elut\u00ed  
\u0161ipka)\nSekund\u00edrn\u00ed spermatoct - v prepar\u00e1tu nejsou moc k nalezen\u00ed\n\u010dasn\u00e9 spermatidy (\u0161ed\u00ed  
\u0161ipka)\nPozdn\u00ed spermatidy (\u010dern\u00e1 \u0161ipka)\nSertoliho bu\u0148ky (\u010derven\u00e1 \u0161ipka)",
  "desc_en": "",
  "insert_who": "IvaG",
  "marks": [
    {
      "shape": "arrow",
      "ori": "left",
      "color": "green",
      "size": "medium",
      "x_rel": "0.030852",
      "y_rel": "0.365094"
    },
    {
      "shape": "arrow",
      "ori": "left",
      "color": "gray",
      "size": "medium",
      "x_rel": "0.028184",
      "y_rel": "0.366031"
    },
    {
      "shape": "arrow",
      "ori": "left",
      "color": "yellow",
      "size": "medium",
      "x_rel": "0.03015",
      "y_rel": "0.370999"
    },
    {
      "shape": "arrow",
      "ori": "left",
      "color": "black",
      "size": "medium",
      "x_rel": "0.018914",
      "y_rel": "0.36814"
    },
    {
      "shape": "arrow",
      "ori": "left",
      "color": "red",
      "size": "medium",
      "x_rel": "0.028295",
      "y_rel": "0.373572"
    }
  ]
},
{
  "idx": "20062+",
  "txt_cz": "1.2 Bu\u0148ky seminiferus contortus II",
  "txt_en": "Cells of seminiferus contortus",
  "desc_cz": "Leidigovy bu\u0148ky\nSpermatogonie",
  "desc_en": "",
  "insert_who": "IvaG"
},
{
  "idx": "20062+",
  "txt_cz": "2. Mediastinum testis",
  "txt_en": "2. Mediastinum testis",
  "desc_cz": "Mediastinum testis je oblast medi\u00e1ln\u00edho okraje varlete, kde je povrchov\u00e1 tunica albuginea  
v\u00fdrazn\u011b z\u0161tlu\u0161t\u00e1 bu\u0161ka. Sm\u011brem do testes z n\u00ed vyb\u00edhaj\u00ed vazivov\u00e1 septa, kter\u00e1 tak  
tvo\u0159\u00ed podklad pro odd\u011blen\u00ed testikul\u00edrn\u00edch lal\u016fk\u00ed. Mediastinum testis je rovn\u011b\u017e  
oblast, kde prob\u00edhaj\u00ed c\u00edlov\u00e9, nervy a vedou tudy intratestikul\u00edrn\u00ed v\u00fdvodn\u00e9 pohlavn\u00ed cesty.",
  "desc_en": "",
  "insert_who": "IvaG",
  "marks": [
    {
```

```

        "shape": "arrow",
        "ori": "down",
        "color": "green",
        "size": "small",
        "x_rel": "0.451399",
        "y_rel": "0.809039"
    }
}
},
{
    "idx": "20062+",
    "txt_cz": "3. Ductus deferens",
    "txt_en": "Ductus deferens",
    "desc_cz": "",
    "desc_en": "",
    "insert_who": "IvaG",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.833879",
            "y_rel": "0.180486"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Bu\u00148ky ductus epididymidis",
    "txt_en": "Cells of ductus epididymidis",
    "desc_cz": "Baz\u00e1ln\u00ed epitelov\u00e1 bu\u00148ka\nVysok\u00e1 cylindrick\u00e1 epitelov\u00e1 bu\u00148ka",
    "desc_en": "",
    "insert_who": "IvaG"
},
{
    "idx": "20062+",
    "txt_cz": "Ductus epididymidis",
    "txt_en": "",
    "desc_cz": "V\u00fdvod nadvarlete je jeden samostatn\u00fd v\u00fdvod dlouh\u00fd p\u00f8ibli\u00158;n\u00e1 5 a\u00158; 6 metr\u00f9. Je mnoh\u00e1n\u00e1 sobn\u00e1 sto\u00e1n\u00e1 v \u00e1etn\u00e1 konvoluty, proto vid\u00e1 mnoho transverz\u00e1ln\u00edch \u00e1i tangenci\u00e1ln\u00edch pr\u00f9\u00f9\u00f8ez\u00f9 kan\u00e1lkem. Cytoarchitektonicky je tvo\u00f8en rovnom\u00e9rn\u00e1 vysok\u00fdm dvou\u00f8ad\u00fdm cylindrick\u00fdm epitelem s apik\u00e1ln\u00edmi stereociliemi. Epitelov\u00e1 bu\u00f2ky jsou dvoj\u00eddho typu, n\u00e1edzk\u00e1 kubick\u00e1 baz\u00e1ln\u00ed bu\u00f2ky se sf\u00e9rick\u00fdm j\u00e1drem a vysok\u00e1 cylindrick\u00e1 bu\u00f2ky s elipsoidn\u00edm j\u00e1drem ulo\u00158;en\u00fdm paraleln\u00e1 s dlouhou osou bu\u00f2ky.\n\r\n V\u00158;154;echny bu\u00f2ky nasedaj\u00ed na baz\u00e1ln\u00ed membr\u00e1nu, pod kterou se nach\u00e1zej\u00ed bu\u00f2ky hladk\u00e1 svaloviny. Ty jsou uspo\u00f8\u00e1dan\u00e1 tak, \u00158;e koncentricky obkru\u00158;uj\u00ed cel\u00fd v\u00fdvod. Zevn\u00e1 se nach\u00e1z\u00ed \u00f8\u00e1d\u00edk\u00e1 kolagenn\u00ed vazivo, kter\u00e1 p\u00f8edstavuje stroma, propojuje jednotliv\u00e1 \u00e1\u00e1sti v\u00fdvodu a obsahuje krevn\u00ed c\u00e1vy a nervy.",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.834608",
            "y_rel": "0.749027"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Leydigova bu\u00148ka",
    "txt_en": "",
    "desc_cz": "Leydigovy interstici\u00e1ln\u00ed bu\u00f2ky maj\u00ed velikost okolo 20 mikrometr\u00f9 a maj\u00ed polygon\u00e1ln\u00ed tvar. Jsou zodpov\u00e1dn\u00e1 za produkci steroidn\u00edho hormonu testosteronu, \u00e1emu\u00158; odpov\u00e1d\u00ed i jejich morfologie. Nach\u00e1z\u00ed se roz\u00e1hl\u00ed v jednovrstevn\u00fd kubick\u00fd a posl\u00e1ho retikul\u00e1 a po\u00e1etn\u00e1 mitochondrie s tubul\u00e1rn\u00edmi kristami, co\u00158; podmi\u00f2uje eosinofilii jejich cytoplazmy.",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.197986",
            "y_rel": "0.617841"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Rete testis",
    "txt_en": "",
    "desc_cz": "Oblast rete testis p\u00f8edstavuje intratestikul\u00e1rn\u00ed v\u00fdvodn\u00e1 pohlavn\u00ed cest\u00fd. Jednotliv\u00e1 sto\u00e1n\u00e1 kan\u00e1lky ve sv\u00e1m pr\u00f9\u00f8b\u00e1 sm\u00e1\u00f8uj\u00ed k oblasti rete testis. Germinativn\u00ed epitel sto\u00e1n\u00e1 kan\u00e1lk\u00f9 postupn\u00e1 p\u00f8ech\u00e1z\u00ed v jednovrstevn\u00fd kubick\u00fd a posl\u00e1ze dla\u00158;dicov\u00fd epitel rete testis. Podporu rete testis vytv\u00e1\u00f8\u00ed hust\u00e1 kolagenn\u00ed vazivo tunica albuginea, kter\u00e1 p\u00f8eka\u00f8uje v mediastium testis.",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.282934",

```

```

        "y_rel": "0.850087"
    }
}
},
{
    "idx": "20062+",
    "txt_cz": "Spermatozoa v lumen ductus epididymidis",
    "txt_en": "",
    "desc_cz": "",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.656618",
            "y_rel": "0.807607"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Stroma ductus epididymidis",
    "txt_en": "",
    "desc_cz": "Struktura stromatu je tvo\u00f8ena \u00f8\u00eddk\u00fdm kolagenn\u00eddm vazivem bohat\u00fdm na fibroblasty. Nach\u00e1z\u00ed se zde krevn\u00ed c\u00e9vy a nervy.",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.681689",
            "y_rel": "0.805436"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Tubulus rectus",
    "txt_en": "",
    "desc_cz": "",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.309875",
            "y_rel": "0.770803"
        }
    ]
},
{
    "idx": "20062+",
    "txt_cz": "Tunica albuginea",
    "txt_en": "",
    "desc_cz": "Pevn\u00fd vazivov\u00fd obal varlete, jeho\u00d8 histologick\u00fdm podkladem je hust\u00ec uspo\u00f8\u00e1dan\u00e9 kolagenn\u00ed vazivo s p\u00f8evahou acelu\u00e1rn\u00ed slo\u00d8ky.",
    "desc_en": "",
    "insert_who": "Gurka",
    "marks": [
        {
            "shape": "arrow",
            "ori": "down",
            "color": "green",
            "size": "small",
            "x_rel": "0.418691",
            "y_rel": "0.334968"
        }
    ]
}
}

```

]