

PATHOLOGISTS' CLUB OF NEW YORK

937

CME (from case)

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IRAN G. JONES, M.D.
ANATOMIC PATHOLOGY
EINSTEIN-WEILER HOSPITAL
103 EASTCHESTER ROAD
BRONX, NY 10461

MEETING

Date: Thursday, April 6, 1995

Place: Queens Hospital Center
82-68 164th Street
Jamaica, NY 11432

Host: Vádimir Bychkov, M.D.

Information: Carol St. John
(718) 883-4113

Reception: 5:30 P.M.

Dinner: 6:00 - 7:00 P.M.

Scientific Session: 7:00 - 9:00 P.M.

ALL THE EVENTS WILL TAKE PLACE IN THE SCHOOL OF NURSING LOUNGE (see attached map). Ample parking is available on the premises. Inform security, if asked, that you are attending the Pathologists' Club.

Directions:

From Manhattan and the Bronx: Take Grand Central Parkway (eastbound) to Parsons Boulevard exit. Continue on the service road to 2nd traffic light (164th St). Turn left on 164th Street. Entrance to the hospital parking lot is on the left side at the first traffic light.

From Long Island: Take Grand Central Parkway (westbound) to 168th Street exit. Continue on the service road to the 2nd traffic light (164th St.). Turn right on 164th Street. Entrance to the hospital parking lot is on the left side at the first traffic light.

From Brooklyn: Take the Brooklyn-Queens Expressway (BQE) to Grand Central Parkway (eastbound) to Parsons Boulevard exit. Continue on the service road to the 2nd traffic light (164th St.). Turn left on 164th Street. Entrance to the hospital parking lot is on the left at the first traffic light.

CASE HISTORIES - PATHOLOGISTS CLUB MEETING, QUEENS HOSPITAL CENTER
4/6/95

Case #1. Invited discussant: Dr. Mary Ramer, Mount Sinal Medical Center
Host discussant: Dr. Victor Azueta.

An 11 y.o. male presented with a large sessile mass originating from the hard palate. A biopsy, was performed followed a week later by complete excision. During the procedure, the lesion appeared to have cupped-out bone of the palate.

Case #2. Invited discussant: Dr. Tawfiqui Bhuiya, Long Island Jewish Medical Center.
Host discussant: Dr. Vladimir Bychkov

A 32 y.o. female was admitted with abdominal pain and distention. An emergency laparotomy revealed omentum and peritoneum studded with multiple gray nodules measuring up to 3 mm in diameter. Biopsies were taken.

Case #3: Invited discussant: Dr. Michael Esposito, Long Island Jewish Medical Center
Host discussant: Dr. Sashikala Krishnan

A 48 y.o. male was admitted with copious hematuria. Cystoscopy revealed a large bladder tumor, and transurethral resection was performed. The specimen consisted of multiple white-tan rubbery fragments weighing 13 gm.

Case #4: Invited discussant: Dr. Joan Jones, Albert Einstein College of Medicine
Host discussant: Dr. Vladimir Bychkov

A 53 y.o. female was admitted with complaints of abdominal discomfort, and right adnexal mass was revealed by ultrasound. At laparotomy, a right ovarian tumor was found and a hysterectomy and bilateral salpingoophorectomy were done. The tumor measured 8 x 7 x 5 cm and was solid and yellowish on cut section. The capsule appeared to be intact. The left ovary, fallopian tubes and the uterus did not show any relevant pathology.

Case #5. Invited discussant: Dr. Andrey Gritsman, Valley Hospital, Ridgewood, NJ
Host discussant: Dr. Ann Chernys

Sputum cytology (unmarked kodachromes) from a 63 y.o. female admitted with chills, night sweats and a 20 lb weight loss.

**MINUTES, PATHOLOGISTS' CLUB MEETING
QUEENS HOSPITAL CENTER
APRIL 6, 1995**

Dr. Vladimir Bychkov was our host at this first 1995 spring meeting of the Club. The turnout was good, as were the food and company. The weather continues to be mild, and I think we're all glad that daylight savings time is here. New applications approved for membership include Drs. Gary Clarke, Zafar M. Khan, and Howard Ratech.

CASE #1: A sessile mass was excised from the hard palate of an 11 year old male. Dr. Ramer showed the histology; a circumscribed lesion with a myxoid to hyalinized stroma within which are islands of epithelium having a variable appearance. In some areas the epithelium forms ductular structures containing a eosinophilic coagulum or cyst like spaces. In these areas a myoepithelial layer is apparant. But in many areas the epithelium shows squamous differentiation with abundant keratin formation. Nevertheless, Dr. Ramer considered this lesion to have a benign appearance and her diagnosis was pleomorphic adenoma. Although these lesions are rare in children, they do occur and their behavior is the same as those occuring in adults. Mitoses may be present but are of no concern. Given the site of this lesion, one differential diagnosis would be mucoepidermoid carcinoma. Dr. Azueta agreed with Dr. Ramer's diagnosis. He noted that the lesion had been present for many years and showed the circumscription of the lesion as seen on MRI. Although there were tubules discernible which were lined by two cell layers, Dr. Azueta was impressed with the extensive squamous differentiation and consulted this case to Dr. Blank. Dr. Blank commented that although, as Dr. Ramer noted, approximately 20% of pleomorphic adenomas may show squamous metaplasia., he too found the extent in this case impressive. He also noted that the mitotic activity seen in this case may have been related to the previous biopsy.

DIAGNOSIS: PLEOMORPHIC ADENOMA

CASE 2: A 32 year old female was admitted with abdominal pain and distention. At laparotomy the omentum and peritoneum were found to be studded with multiple grey nodules measuring up to 3 mm. in diameter. Dr. Bhuiya described the nodules as composed of haphazardly arranged elongate cells in a fibrillar background, covered by a prominent mesothelial lining, and admixed with inflammatory cells. These nodules were relatively paucicellular, and Dr. Bhuiya's differential diagnosis included leiomyomatosis peritonei and gliomatosis peritonei. In leiomyomatosis peritonei, one finds nodules of smooth muscle in the subperitoneum of the abdominal cavity. It may be seen in women who are pregnant or on oral contraceptives. Histologically the nodules look like leiomyomas and electron microscopy or immunocytochemistry would also demonstrate smooth muscle differentiation. In this particular case muscle specific actin was negative and GFAP was strongly positive; hence the diagnosis gliomatosis peritonei. This entity was first described by Robboy and Scully in 1972. It is a condition in which one finds miliary implants composed of mature glial tissue. The peak incidence is in the second decade, and it may be a rare complication of solid ovarian teratomas which in most cases are immature. Staining for S-100 is variable, and in fact in this case was negative. Of the various mechanisms proposed for this process, Scully favors one in which mature glial tissue is extruded through a defect in the capsule of a primary tumor. As for the natural history, the nodules may undergo "fibroblastic transformation", remain asymptomatic and persist, or rarely undergo malignant transformation. Interestingly, in those patients with high grade ovarian teratomas, the presence of mature glial implants is associated with an improved prognosis. Dr. Bychkov agreed with the diagnosis and shared that the source for the gliomatosis peritonei was a 15 cm. 1000 gram teratoma. The cut surface was variegated and although many areas were mature, immature glial elements were also identified. The immature component, however, comprised only about 5% of the neoplasm. Treatment consisted of a unilateral salpingo-oophorectomy.

DIAGNOSIS: GLIOMATOSIS PERITONEI

CASE 3: A 48 year old male admitted with copious hematuria is found to have a large bladder tumor and a transurethral resection is performed. On microscopic examination, Dr. Esposito noted that no normal tissue was identifiable. Rather all tissue fragments contained a diffuse malignant neoplasm having large nuclei and central nucleoli. Dr. Esposito's differential diagnosis included poorly differentiated carcinoma of the bladder, diffuse large cell lymphoma, metastatic prostate cancer, and melanoma. By immunostains the tumor was keratin negative and LCA and L26 positive. Hence the diagnosis Non-Hodgkin's lymphoma, diffuse large cell type. Primary lymphomas of the bladder are rare, constituting less than 1 percent of all cases of extra nodal lymphomas. Usually these are B cells neoplasms and there is a female predominance. With the exception perhaps of MALT related lymphomas, there is no relationship to chronic cystitis. In general these lymphomas tend to have a favorable prognosis. Dr. Krishnan gave the the additional data that at the time of admission, this patient, a Chinese, gave a history of weakness, malaise and fatigue. Urine cytology was suspicious for lymphoma, but all other studies showed no evidence of nodal disease. At the time of cystoscopy, a prostate and rectal biopsy were performed which were negative. Dr. Krishnan's diagnosis on the bladder neoplasm was also Non-Hodgkin's lymphoma, diffuse large cell type. The patient has now received six cycles of chemotherapy and shows no gross evidence of residual disease in the bladder or in other organ systems. Although patients with AIDS may develop extranodal lymphoma in unusual locations, this patient is HIV negative.

DIAGNOSIS: NON-HODGKIN'S LYMPHOMA, LARGE CELL TYPE

CASE 4: A 53 year old female admitted with complaints of abdominal discomfort was found to have a right adnexal mass. At laparotomy an 8 cm. right ovarian tumor was found which was solid and yellowish on cut section. The capsule was intact. The contralateral ovary, fallopian tubes and uterus did not show any relevant pathology. Histologically, the tumor was composed of elongate to somewhat angulated cells with vesicular nuclei, occasional nucleoli, and containing a variable amount of cytoplasm. The cells had a haphazard to vaguely nested appearance. Of the primary ovarian neoplasms, only the sex cord stromal category was considered a likely possibility. The histology of some tumors which may secondarily involve the ovaries was also reviewed including metastatic breast, Krukenberg's tumor, lymphomas, and leukemias, all of which may produce solid masses. By immunocytochemistry, the tumor cells were keratin negative and vimentin positive. A reticulin stain outlined nests of tumor cells thereby excluding the fibrothecoma group. Given the histology, age of the patient, stage of disease, and the tumor's gross appearance, Dr. Jones' diagnosis was granulosa cell tumor, adult type. An unusual feature in this tumor, however, was the relative large size of the neoplastic cells. Dr. Bychkov agreed with Dr. Jones' diagnosis. Although stains for Oil-Red-O were negative, electron microscopy confirmed the presence of lipid, and some cells stained positively for progesterone receptors. Tumor cells were also positive for NSE and S-100, the significance of which is not known. Other neuroendocrine markers were negative. This case was consulted to Dr. Talerman and to colleagues of Dr. Scully whose diagnoses were also adult granulosa cell tumor. The ascitic fluid was positive for tumor cells and the endometrium showed cystic change which may have reflected stimulation at some time in the past.

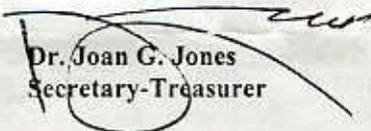
DIAGNOSIS: GRANULOSA CELL TUMOR, ADULT TYPE.

CASE 5: Sputum cytology was obtained from a 63 year old female admitted with chills, night sweats and a 20 pound weight loss. Dr. Gritsman reviewed the findings on the three kodachromes provided. They showed very large cells containing large dark structures. Dr. Gritsman wondered if the changes were due to degeneration, fixation artifact, intracytoplasmic organisms such as cryptococcus, histoplasma or toxoplasma, or whether the patient had a history of radiotherapy or chemotherapy. The changes seen after radiotherapy include nuclear enlargement, cytoplasmic enlargement and cytoplasmic vacuolization. Chemotherapy can dramatically alter the morphology of bronchial lining cells. Dr. Gritsman noted that in

general, sputum cytology can be useful for detecting early squamous carcinoma, but several specimens may be necessary. In addition, interobserver agreement is good for severe atypia or carcinoma. Dr. Chernys noted that three sputums had been collected on this patient, each of which was fixed in an equal volume of 50% alcohol. In some of the extremely large cells, cilia were identifiable, and hence could be identified as bronchial lining cells. Additional critical history was that the patient had had CML for three years treated with busulfan and prednisone. Her exposure to chemotherapy had been long term. Because the patient continued to be symptomatic, a transbronchial biopsy was performed and showed the same huge atypical cells. Malignant tumor masses, however, were never demonstrated, and the changes were interpreted as busulfan effect. Unfortunately the patient's respiratory status continued to decline ultimately leading to her death.

DIAGNOSIS: SPUTUM CYTOLOGY SHOWING BULSULFAN EFFECT

Respectfully submitted,



Dr. Joan G. Jones
Secretary-Treasurer

NEXT MEETING DATE: MAY 4, 1995

**JOINT MEETING: THE LONG ISLAND COLLEGE HOSPITAL
NEW YORK METHODIST HOSPITAL**

HOST: DR. P. DANIEL PENHA