

Johnny Doe's* Treatment for High-Risk Neuroblastoma 1995-1996

UPDATED 5/1/2006 *all names and phone numbers are fictitious

- ◆ Age at diagnosis: 3 years 9 months, stage 4, rt adrenal
- ◆ Allergies: sulfonamide antibiotics
- ◆ Diagnosed 12/30/95, DOB 3/19/92
- ◆ **Presented** with 3 weeks of fever, increasing bone pain in knees and pelvis; bone scan: widespread lesions (pelvis, distal and proximal femurs, ribs, skull, humeri, calcified abdominal mass), ultrasound, MRI, CT: 3 x 5 x 1.5 cm³ primary tumor on right adrenal gland, bone marrow biopsy 100% replaced with NB, transfused with packed red cells for low hemoglobin, low WBC and PLT; HVA = 78.2 VMA = 235 (MIBG negative)
- ◆ 6/1/96 tumor biopsy (after 6 rounds of chemo): MYCN non-amplified, 1p deletion, poor histology, calcification, 4 x 1.7 cm tumor removed, plus affected nearby lymph nodes
- ◆ Treatment center: **Children's Hospital/ ABC Cancer Institute**
123 Pleasant St, Anytown, NY 12345 (123) 345- 6789
- ◆ Treatment team: oncologist Dr. Mary Jones; surgeon Dr. Robert Smith, transplant Dr. Tom Johnson, radiation oncologist Dr. Ruth Williams
- ◆ Discharged from SCT on 11/13/96.
- ◆ Last hospitalization 11/28/96 to 12/4/96 for shingles, on acyclovir.
Single central venous line placed 12/30/95, removed 11/4/96.
Double lumen CVL placed 8/17/96, removed 1/13/97.

Date	Chemotherapy	IV Dosage	Amount Given
Cycle 1 Induction Protocol #1234			wt = 18.7 kg BSA = .98 m ²
12/31/95	cyclophosphamide	1000 mg/m ²	980 mg x 3 days
	cisplatin	100 mg/m ²	98 mg x 1 day

1/10 - 1/16 admitted for fever and neutropenia, given piperacillin and gentamicin

Cycle 2			wt = 15.6 kg BSA = .99 m ²
1/21/96	cyclophosphamide	1000 mg/m ²	990 mg x 3 days
	cisplatin	100 mg/m ²	99 mg x 1 day

2/9 - 2/12 admitted for neutropenia and fever, given piperacillin and gentamicin

2/11 CT scan revealed no reduction in size of primary tumor; researched pilot protocol

2/18 L bone marrow biopsy: persistent NB, some maturation, aspirate clear

Changed to Pilot Protocol #5678

Cycle 3 (MESNA 496 mg/m² x 6 given with each dose of ifosfamide or cytoxan)			wt = 15.6 kg BSA = 1.0 m ²
2/18/96	ifosfamide	2 g/m ²	2 g x 3 days
	etoposide	150 mg/m ²	150 mg x 3 days

2/22 - 3/2 GCSF injections 10 mcg/kg/day, preventing fever and neutropenia

Cycle 4			wt = 16.6 kg BSA = 1.04 m ²
3/10/96	carboplatin	500 mg/m ²	520 mg x 2 days
	etoposide	150 mg/m ²	155 mg x 3 days

3/20 - 3/26 GCSF injections

Cycle 5			wt = 16.2 kg BSA = 1.05 m ²
3/31/96	cisplatin	40 mg/m ²	42 mg x 5 days
	etoposide	150 mg/m ²	155 mg x 3 days

4/5 - 4/14 GCSF injections

4/5 - 4/11 hospitalized for severe nausea and dehydration

Cycle 6			wt = 16.1 kg BSA = 1.0 m ²
4/22/96	vincristine	1.5 mg/m ²	1.5 mg x 3 days
	doxorubicin	60 mg/m ²	60 mg x 1 day
	cyclophosphamide	600 mg/m ²	600 mg x 2 days

4/25 - 4/30 GCSF injections 5 mcg/kg
 5/1 - 5/6 GCSF injections 10 mcg/kg
 5/22 CT: decreased tumor size to 4 x 1.7 cm, increased calcification, decreased adenopathy
 5/22 BX: negative for NB
 6/1 bilateral BX: positive for NB
 6/1 **surgery to remove primary tumor** on RT adrenal and numerous affected lymph nodes

			wt = 16.3 kg BSA = 1.0 m ²
6/8/96	ifosfamide	2 g/m ²	2 g x 3 days
	etoposide	150 mg/m ²	150 mg x 3 days

6/12 - 6/22 GCSF injections 10 mcg/kg

			wt = 16.4 kg BSA = 1.0 m ²
7/10/96	carboplatin	500 mg/m ²	500 mg x 2 days
	etoposide *	100 mg/m ²	100 mg x 3 days

*note dosage change from what is listed on protocol (150 mg/m²)y

7/14 - 7/30 GCSF injections 10 mcg/kg
 7/21 CT: 8 mm calcified node L of aorta; bone scan negative
 8/11 bilateral BX: negative for NB
 8/17 stem cell harvest; purged at CHLA

			wt = 16.8 kg BSA = 1.05 m ²
8/24/96	carboplatin*	500 mg/m ²	525 mg x 1 day
	etoposide *	75 mg/m ²	78.8 mg x 3 days

*dose reduction due to radiation treatment

Radiation Therapy

8/27 - 9/21 **16 fractions of radiation to right abdomen, 150 cGy each for total of 2400 cGy**
Field size: 11.5 x 13.5 cm

			wt = 17.2 kg BSA = 1.05 m ²
9/29/96	carboplatin	667 mg/m ²	700 mg x 3 days
	etoposide	800 mg/m ²	840 mg x 3 days
10/2/96	cyclophosphamide*	1800 mg/m ²	1890 mg x 2 days

*MESNA 348 mg Q3hrs

10/5/96 Stem cell infusion: 0.84 x 10⁸ cells after purging.

During SCT, fevers were treated with piperacillin, gentamicin, vancomycin, and amphotericin 0.5 mg/kg. On 10/30, levels were high (gentamycin 13.4, vancomycin 46.6). Vanco, gent and pip were replaced with ceftozidime 1.5 g 3x/day. Although his hearing loss was credited to high levels of antibiotics, we first noted hearing deficit on 10/22.

11/13/96 Discharged on day +39 (after 47 days in the hospital) with ANC of 440.

Johnny received 17 platelet transfusions and 20 red cell transfusions during one year of treatment.

TOTAL CHEMOTHERAPY DOSE 1995-1996			
Etoposide	4.725 g/m ²	Doxorubicin	60 mg/m ²
Carboplatin	4.5 g/m ²	Ifosfamide	12 g/m ²
Cisplatin	400 g/m ²	Vincristine	4.5 mg/m ²
Cyclophosphamide	10.8 g/m ²		

Follow-up Exams:

4/19/97 echo and electro cardiogram, nl	7/99 echo and electro cardiogram (normal)
8/30/97 scoliosis films and immunizations, nl	7/99 dental exam, no cavities
3/3/98 eye exam, glasses	7/99 audiology exam (no change in hearing loss)
8/27/98 dental exam, no cavities	7/99 last physical exam and blood work with oncologist (all labs normal)
7/21/99 audiology exam (mild to profound hearing loss above 1500 Hz)	7/99 Hepatitis C screening, neg
3/99 eye exam, new rx	

HEALTH CARE PROFESSIONALS (1997-1999)

Dentist: Michelle Hauge, 1711 N Murray Blvd, CS 80996 (222) 596-1022
Audiologist: Marge Hale, Audiology Clinic, Evans Army Hospital
Pediatrician: Rita Burt, Peterson AFB Clinic (222) 556-1121
Pediatric Oncologist: Anthony Christensen, Memorial Hospital, Colorado Springs CO

CURRENT HEALTH CARE PROFESSIONALS (1999-present)

Physician: Vern E. Jones, 205 W 7th St, Fargo ND 58470 (111) 732-1234
Dentist: David Jackson, 19033 US 71, Fargo ND 58470 (111) 732-1122
Oncologist: Nathan Thomas, RMCC, 820 4th St N, Fargo ND 58122 (111) 234-2233

Other events:

Chronic infected toe nails 1996-1999 on various antibiotics on and off for 6 years, at age 9 given ciprofloxacin based on culture revealing resistant bacteria present (x-ray for growth plate closure in feet). Typical ingrown toenail surgery performed 5 times, problem resurfaced every time. In 2002 podiatrist (Dr. Williamson, Dakota Clinic) did surgery to remove sequestered infected tissue, problem resolved.

Broke right wrist 2001, surgeries in 2002 and 2003: required bone graft, and removal of pin, Olson, J Don MD (111) 222-3333; 2301 25th St S, Fargo, ND 58103

Health Summary: present health is good, with profound high-frequency hearing loss (≥ 2000 Hz), no hearing aids, occasional respiratory problems, allergies, asthma

Prior History:

DOB 03/19/92 Born Oakland Naval Hospital, Oakland CA
Surgery for tubes in ears – repeated ear infections June 1993, Oakland Naval Hospital

Excellent health, normal hearing until NB treatment.
Immunizations complete until after transplant in 1996, reactions prevented more immunizations after transplant.

Family cancer incidence: (paternal side) grandmother breast and stomach cancer, aunt melanoma age 16 at death, aunt thyroid cancer